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TRANSACTIONS

OF THE

ALABAMA DENTAL ASSOCIATION

HELD IN

MONTGOMERY, ALA., APRIL 11TH, 1883.

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PROCEEDINGS.

THE ALABAMA DENTAL ASSOCIATION was organized in Montgomery, Alabama, on the 1st day of October, 1869, and the following officers were elected to serve for one year:

Dr. J. G. McAuley, of Selma, Ala., President.

Dr. S. Rambo, of Montgomery, Ala., 1st Vice Pres't.

Dr. W. W. Evans, of Union Springs, Ala., 2d Vice Pres't.

Dr. W. J. Reese, of Montgomery, Ala., Recording Sec'y.

The duties of Corresponding Secretary, and Treasurer, being performed by the Recording Secretary.

The Association adjourned on the 3d to meet in Selma, Ala., on the 3d Wednesday in August, 1870.

SELMA, ALA., August 17th, 1870.

The Association met at 11 o'clock, and organized with the President in the chair. After the usual business, the following officers were elected to serve for the ensuing year:

Dr. Sam'l Rambo, Montgomery, President.

Dr. Wm. Deason, Mobile, 1st Vice President.

Dr. J. W. Keyes, Montgomery, 2d Vice President.

Dr. Robert A. Savage, Mobile, Recording Secretary.

Dr. W. J. Reese, Montgomery, Corresponding Secretary.

Dr. Rob't A. Savage, Mobile, Treasurer.

The Association adjourned after a three days session, to meet in Mobile, August 16th, 1871.

MOBILE, ALA., August 16th, 1871.

The Association was organized by the 1st Vice President, and the usual business transacted, after which the following were elected officers to serve during the ensuing year:

Dr. J. W. Keyes, Montgomery, President.

Dr. J. C. Storey, Eutaw, 1st Vice-President.

Dr. W. D. Dunlap, Selma, 2d Vice-President.

Dr. Robt. A. Savage, Mobile, Recording Sec'y and Treas'r.

Dr. E. G. Wheeler, Mobile, Corresponding Secretary.

Adjourned to meet in Montgomery on the 3d Wednesday in August, 1872.

MONTGOMERY, ALA., August 3d, 1872.

The meeting was called to order by the President at 10 o'clock, and the usual business transacted; afterwards the following were elected officers to serve the ensuing year:

Dr. Wm. Deason, Mobile, President.

Dr. E. G. Wheeler, Mobile, 1st Vice President.

Dr. E. H. Locke, Troy, 2d Vice President.

Dr. W. J. Reese, Montgomery, Secretary and Treasurer.

Adjourned to meet in Montgomery on the 20th of August, 1873.

MONTGOMERY, ALA., Aug. 20th, 1873.

The meeting was called to order by the President, and the usual business transacted, when the following were elected officers for the ensuing year:

Dr. E. G. Wheeler, Mobile, President.

Dr. W. D. Dunlap, Selma, 1st Vice President.

Dr. Stevens, Montgomery, 2d Vice President.

Dr. W. J. Reese, Montgomery, Secretary and Treasurer.

Adjourned to meet in Mobile on the 3d Wednesday in Aug., 1874, but yellow fever having made its appearance there, and

the crops turning out badly, it was thought advisable to have no meeting, nor did the financial condition of the country justify an effort to assemble for several years afterwards.

Early in the summer of 1880, a call was issued by a number of prominent dentists for a dental convention, which assembled in Montgomery on the 20th of July, 1880, when the Association was revived, with the following officers for the ensuing year:

Dr. W. D. Dunlap, Selma, President.
Dr. E. S. Chisholm, Tuscaloosa, 1st Vice President.
Dr. W. R. McWilliams, Athens, 2d Vice President.
Dr. T. M. Allen, Eufaula, Recording Secretary.
Dr. G. M. Rousseau, Montgomery, Corresponding Sec'y.
Dr. S. Rambo, Montgomery, Treasurer.

The first five of the officers were placed on a Committee on Legislation, and were authorized to frame and have a suitable law passed, which was accomplished and took effect February 11th, 1881, superseding the law passed December 31, 1841; and under the law, the members of the committee became members of the examining board provisionally. The law is as follows:

AN ACT

To Regulate the Practice of Dentistry in the State of Alabama.

Section 1. *Be it enacted by the General Assembly of Alabama,* That from and after the passage of this act it shall be unlawful for any person to engage in the practice of dentistry in the State of Alabama unless said person has obtained license from a board of dental examiners duly authorized and appointed by this act to issue such license. Provided, that dentists who have been in the regular practice of dentistry for five years next preceding the passage of this act, shall not be required to submit to an examination, and shall be entitled to license without fee, which shall be transmitted to him by mail or otherwise upon his application accompanied by an affidavit to the fact of his having been in the regular practice for the required time.

Sec. 2. *Be it further enacted,* That the board of dental examiners shall consist of five (5) dental graduates, or practitioners of dentistry, who have obtained a license to practice dentistry from a medical board in this State, or from a dental board organized under this act, and who are

members in good standing of the Alabama Dental Association; provided, that said graduates or practitioners have been practicing dentistry in the State of Alabama for a period not less than three (3) years; and, provided further, that the first board of examiners under this act shall consist of the present executive committee of the Alabama Dental Association, who shall hold office until the next annual meeting of the said association, and until their successors are elected and qualified as hereinafter provided.

Sec. 3. *Be it further enacted,* That it shall be the duty of the said Alabama Dental Association, at its annual meeting next after the passage of this act, and every two years thereafter, to elect said board of examiners who shall hold office for the term of two (2) years, and until their successors are elected and qualified. The President of said Association shall have power to fill all vacancies in said board for unexpired terms.

Sec. 4. *Be it further enacted,* That it shall be the duty of said board of examiners:

1st. To meet annually at the time and place of meeting of the Alabama Dental Association, or oftener, at the call of any three of the members of said board. Thirty days notice must be given of the time and place of meeting of said board; said notice to be mailed to all practicing dentists in the State.

2d. To prescribe a course of reading for those who study dentistry under private instruction.

3d. To grant a license to any applicant who shall furnish satisfactory evidence of having graduated and received a diploma from any incorporated Dental College, or who has heretofore received a license from a medical board in this State, without examination or fee.

4th. To grant license to all other applicants who undergo a satisfactory examination, who shall pay to the said board a fee of five dollars for said license.

5th. To keep a book in which shall be registered the names of all persons licensed to practice dentistry in this State.

Sec. 5. *Be it further enacted,* That the book so kept shall be a book of record, and a transcript from it certified to by the officer who has it in keeping with the common seal of said board, shall be evidence in any court of this State.

Sec. 6. *Be it further enacted,* That three members of said board shall constitute a quorum for the transaction of business and should a quorum not be present on the day appointed for its meeting, those present may adjourn from day to day, until a quorum is present.

Sec. 7. *Be it further enacted,* That one member of said board may grant a license for an applicant to practice until the next regular meeting of the board, when he shall report the fact, at which time the temporary license shall not be granted by a member of the board after the board has rejected the applicant.

Sec. 8. *Be it further enacted,* That any person who shall, in violation of this act, practice dentistry in this State for a fee or reward shall be liable to indictment, and on conviction shall be fined not less than fifty nor more than three hundred dollars; provided, that nothing in this act shall be construed to prevent persons from extracting teeth.

Sec. 9. *Be it further enacted,* That on the trial of such indictment it shall be incumbent npon the defendant to exempt him from the penalties of this act, to show that he has authority under the law to practice dentistry in this State.

Sec. 10. *Be it further enacted,* That every person to whom license is issued by said board of examiners shall, within thirty days from the date thereof, present the same to the Judge of the Probate Court of the county in which he resides, who shall officially endorse said license, and seal it with the seal of the court, and who shall record said license in a proper book in his office, and who shall be entitled to receive a fee of one (1) dollar for his services, but a temporary license issued under section 7 of this act need not be sealed or recorded.

Sec. 11. *Be it further enacted,* That it shall be the duty of the solicitors of this State, to prosecute all persons violating all or any portion of this act.

Sec. 12. *Be it further enacted,* That all laws or part of laws in conflict with this act be and the same are hereby repealed.

Approved February 11, 1881.

The Association adjourned to meet in Selma, on the 19th of July, 1884.

SELMA, ALA., July 19th, 1881.

The President called the meeting to order. The Constitution and By-Laws as revised were adopted. The Permanent Dental Examining Board was organized by the election of the following:

E. S. Chisholm, *Chairman.*
W. R. McWilliams,
T. M. Allen, *Secretary,*
W. D. Dunlap,
J. G. McAuley,

as members of the board, to serve for two years.

The following were elected officers for the ensuing year:

G. M. Rousseau, Montgomery, President.

W. R. McWilliams, Athens, 1st Vice President.
R. U. DuBois, Greensboro, 2d Vice President.
T. M. Allen, Eufaula, Secretary.
S. C. Wilkerson, Tuscaloosa, Treasurer.
Adjourned to meet in Montgomery, on the 2d Tuesday in April, 1882.

MONTGOMERY, ALA., April 11th, 1882.

The President called the meeting to order and the usual business was transacted. Dr. J. C. Wilkinson, of Selma, was appointed to fill the unexpired term of W. D. Dunlap, he having withdrawn from the board. The following were elected officers for the ensuing year:

Dr. J. C. Johnston, Marion, President.
Dr. S. G. Robertson, Eufaula, 1st Vice President.
Dr. A. Ewbank, Birmingham, 2d Vice President.
Dr. E. Wagner, Montgomery, Secretary.
Dr. G. M. Rousseau, Montgomery, Treasurer.
Adjourned to meet in Montgomery, the 2nd Tuesday in April, 1883.

MONTGOMERY, ALA., April 11th, 1883.

The Association was called to order by the President, Dr. J. C. Johnson, and the session opened with prayer by Dr. W. H. Morgan, of Nashville, Tenn. The President then delivered the annual address.

PRESIDENT'S ADDRESS.

Gentlemen and Members of the Alabama Dental Association:

In compliance with a provision of our Constitution, which makes it the duty of the retiring President to deliver an address, I will present a few thoughts for your consideration, asking that charity of critical judgment that you would covet under like circumstances. I shall attempt no rhetorical display, but shall confine myself to the elimination of a few ideas, practical in their nature, that if properly appreciated and acted upon by us, would greatly enlarge the field of our usefulness. Permit me to say, before entering upon my subject, that the position of honor to which your confidence elevated me was doubly appreciated, from the fact that it was wholly unlooked for and unsolicited. In the discharge of the duties of my office, I have endeavored faithfully to carry out the tenets of the same; errors of judgment may have been committed in the selection of members constituting the different committees. Justice to *all*, and a desire to encourge that unity of feeling and purpose which are alone guaranties of success, in any organization consisting of those pursuing the same profession in life, have been my aim. For what is the object of our banding together? Is it the emoluments and honors to be had at each recurring session of our Convention? Are there no higher considerations that should engage our united efforts—no other goal to reach? I trust I but express the sentiment lurking in every honest heart, when I say, there is a *nobler*, a grander purpose in view, than the mere honor bestowed by the benefactions of the Association, and the dollars and dimes it may deposit in our coffers. Sordid motives should be banished from our midst, and we should come together exercising that charity and friendly feeling which should characterize us as a band of brothers, labor-

ing for a common purpose, viz: the amelioration of the suffering of a common humanity. Then away with any and every thought or action that would impede our desires. I propose to notice a few of the advantages to be derived from our association together, and that all-important concomitant to success, *unity*, without which we may expect to derive no benefit, accomplish no good. As yet, our organization is young; it is, as it were, in its incipiency, and ere an enemy sow the seeds of discord among us, let me sound the tocsin of alarm—for I am not unmindful of the fact that we are all human, and to err is but the outcropping of our natures. I know that when our services or abilities are not recognized, and rewarded with positions of honor or preferment that we deem our right, we are prone to murmur. But all such thoughts, if entertained by us, and fed with the pabulum of jealousy, will sooner or later act as the scalpel to dissect the body of our union, and before we are aware of it, a requium to our fondest hopes will be heard, and a stigma attached to the name of *dentist* that will cause the blush of shame to mantle the cheek of every *high minded*, honorable member of our profession. Ours is a noble, an honorable calling, and we should see to it that its good name be not tarnished by any negligence or schism of our own. We are its custodians, bound to use all the means within our grasp to qualify ourselves for so responsible a position. We are pledged by virtue of this position to do so; the public expect it, they have a right to *demand* it. Recognizing this fact, it is incumbent upon us to bring into the field of professional life that energy of mind, soul and heart that will enable us to delve deep for the hidden treasures of our specialty, and expose, if possible, rich veins of truth, as the result of our labors. To do this, we must have self-reliance, individuality, unity of being, and an inflexible purpose in the pursuit of that knowledge which is to qualify us to cope with the difficulties constantly arising in the field of our practice. A man that is devoid of this—as has been truly said—is not himself. The aggregate of his personal identity is made up of scattered fractions, that have no harmony in them; like the frail barque of the mariner, that is driven by

the tempest over the turbulent billows, he is tossed by the breath of public opinion from wave-crest to wave-crest, without chart or compass, a mind chaotic, with no settled purpose, no grand focus to which he may direct his energies; but passes on until the wave of oblivion sweeps over him, and he is gone.

"God" never intended man to solve the problem of life in a hermitage. The idea is abhorrent to his nature; he is a social being, endowed with faculties that social contact alone will develop and minister to his happiness. From the earliest period of time down to the present moment, man has recognized the great power to be derived from association. Its benefits are so evident, that it seems superfluous to offer any argument to prove the fact. The past has fully demonstrated it. Through this agency the strength of numbers is brought to bear upon any given subject, and different lines of thought are brought forward, all contributing to elucidate it. Many, if not all the great enterprises of the world have been brought into successful operation through its potent agency. Its influence is seen in the development of personal powers, for while we rise as a united whole in the scale of social position, the capacity of each individual is enlarged, and the finer feelings of our high strung natures vibrate with thrilling pleasure at each onward stride.

Every man, says some writer, ought to feel *himself* a *center*, but no man ought to feel himself a circle. We should never become so individualized as to lose sight of the fact that there are others in the world besides ourselves. Our destiny can not be separated from that close relationship we sustain to each other. "God" has endowed man with certain inalienable rights, but he should see to it that they do not contravene the rights of others. What may be our right or duty under all circumstances, must be determined according to this principle: There can be no conflict between my rights and the rights of my neighbor, but while I pay due respect to the rights of others, I must take care to maintain my own personal identity; for what is the estimate placed by the public upon that man who *has no* individuality? He is like a leaf that is borne upon the tide of public opinion; he does not possess energy enough to entertain a thought of his

own; he is too timid to promulgate an opinion, and is so fickle as to be unable to decide what to think or do. Such a position is unenviable, to say the least of it; yet how many of these pitiable objects we see along the highway of life—and I fear that there are not a few to be found in our ranks. Better for *them*, better for their victims, had they sought some other vocation more congenial to their tastes, and better qualified to fill. It is a lamentable fact, that our profession, more than all others, seems to have suffered from charletanism. The great incubus, ignorance, has done more to fetter our progress than anything else. It is within the memory of many who hear me to-day when our profession rested under the ban of public opinion, and with shame do I confess that even *now*, in the blaze of this enlightened age, when onward is the watchword all around us, the dentist—in some localities, at least—is spoken of as a mere "tooth *carpenter*,"—a member of a hawking profession, like the vendor of some patent nostrum, who goes about seeking those whose gullibility will afford him the means to vegetate upon. There has been a vast improvement in this respect—there should be more.

Our State Legislature, by the enactment of certain laws, prayed for in a petition presented by a committee of dentists, has given us a vantage ground that should be appreciated and improved. *Onward* should be our watchword, until the acme of our hopes are realized—until we stand, where 'tis our right, the peer of any in medical ranks. The day is past, I trust, when every father sees the budding of genius in his son, because, perchance, he may be able to carve an image out of wood, or is born with a fully erupted tooth, and deems that he is a fit subject to enter the arena of chirurgical science, fully fledged, although through ignorance he may inflict pain and irreparable loss upon some suffering patient, and mar the visage, possibly, of some peri of the gentler sex. Those of us who recognize the dignity of our calling, and are impressed with the great responsibility devolving upon us to further the cause of science in the same, thereby increasing our ability for usefulness in our chosen field, have felt sadly the need of just

such organizations as we now have for the development of progress, by a free inter-communication of ideas, which has long been the desire of many in our own beloved South. We should see to it, that nothing may retard the progress of our desires. That our most sanguine expectations may be realized in these yearly gatherings, we should cultivate the warmest feelings of friendship and respect for each other, showing a generous and conciliatory spirit of self-denial, sedulously avoiding all occasions of dissension and wrangling; for, as I have before said, should discord be encouraged, the demon envy will usurp the throne of reason, and the strong cords of brotherly love will burst asunder, and there will come a speedy end of usefulness as well as of our fondest hopes. Whilst we are laboring for our own good, and the advancement of science in our specialty, we should never lose sight of the fact that *we* are *largely* indebted for our advanced position, to the *unselfish* devotion of those who have preceded us; and we should endeavor to leave such a record as will stimulate our successors to renewed efforts for the advancement and up-building of our art—leave, as has been so beautifully expressed by one of our honored poets,

> "Footprints that perhaps another,
> Sailing o'er life's solemn main,
> A forlorn and ship-wrecked brother,
> *Seeing*, may take heart again."

What a power there is in united effort! Almost beyond computation, potent alike for good or ill. The "Bible," that book of books, whose sacred pages are replete with wisdom, gives us some idea of its potency, when it says that where two or three agree as touching any thing, their faithful supplications will be answered. If, then, unity of purpose, so clearly taught in spiritual things, is necessary for spiritual welfare, is it not equally so in temporal things? I am reminded of one of Æsop's fables, which forcibly illustrates this idea of unity; it is no doubt familiar to you all: A father wishing to inculcate the spirit of love and unity in his sons, called them together and gave each a twig, and desired them to break them, which they easily did one by one. Now, said he, bind them all together and break

them. They failed; and so a practical lesson was taught them of the value of unity, which, if heeded, would be of inestimable value through life.

But for the toil and labor of our predecessors, who have given the best energies of their lives for the development of our specialty, we should not be able to contribute much of value to the accumulated stock. There is, therefore, a binding obligation, I might say a debt—a debt of honor—resting upon us, which can he cancelled in no other way but by giving to the profession and its literature our time and talents. Whatevar may be developed by our researches that would prove a benefit in practice, or ameliorate the sufferings of our fellow man, belongs alike to the profession; for from its vast store-house *we* have been nourished and furnished the means for the prosecution of our researches. It might be well here to note other obligations, which are no less binding. I refer to our patients and our obligations to them. When they apply to us for the prevention, alleviation or relief of their sufferings, we owe it to them that we have, as far as possible, at our command the resources of our art, that we may intelligently and successfully combat disease and stay its ravages. By virtue of our responsibility as professional men, we are pledged faithfully to use every means within our power that will qualify us for the performance of these duties.

Our time is not our own, 'tis not to be squandered, no folding of the hands in ease, lest the subtle syren sing us to sleep, and the knowledge hereafter gained be locked up with rust, for the want of use, and the deft fingers lose their suppleness. If we permit such a state of things to ensue, we do violence to the most sacred implied pledges. At the chair, in the laboratory, or pouring over the literature of our profession, we should be educating our hands, our heads, and our hearts for the performance of those delicate duties entrusted to our care. Every one of us look forward to this mecca of our hopes, with increasing interest, and endeavor to contribute something of value to the common fund, we should not simply report our successes, for there a false impression is liable to be made upon

the minds of a timid brother, and he be discouraged thereby. We *all* make failures, whether we are willing to acknowledge them or not, acknowledge them like men, and give to the membership the benefit of your experience; possibly some brother has been laboring under the same, or similar difficulties, and by patient application has been able to overcome them, if so, let him relate his experience and all will be benefitted.

In conclusion, permit me to thank you for your kind consideration and support during the sittings of this convention, and in the discharge of the duties of my office. When we return to the field of our labors, may we feel that the time spent here has not been lost, but has better qualified us, in every respect to enter with more zeal and earnestness upon the duties of our profession.

So long as we have prudence for our guide, charity for our hand-maid, and unity for our strength, we have nothing to fear. Success is certain and, with prophetic eye, I can look forward into the future and see, at no distant day, victory perched upon our banners, and huzzahs ascending from every lip. The earth will echo back the shout, the joyful news will spread the world around, until all shall be brought to an appreciation of our worth, and not a single stain shall blot the fair escutcheon of our profession.

The Secretary called the roll and the following members responded:

Drs. T. M. Allen, E. S. Chisholm, W. D. Dunlap, R. U. DuBois, A. Ewbank, J. C. Johnston, A. Jackson, J. W. Locke, J. G. McAuley, W. R. McWilliams, A. M. Rambo, G. M Rousseau, S. G. Robertson, W. B. Stewart, E. Wagner T. P. Whitby and S. Rambo.

On motion, the members of the medical profession and of the press were invited to seats on the floor.

The President appointed the following: Drs. G. M. Rousseau, R. U. DuBois and J. W. Locke, as Committee on Membership, and the following names were presented and favorably reported on: Drs. Geo. Ewbank and C. A. Merrell, Birmingham; H. G. Saunders, Macon Station; F. H. McAnnally,

Lively; W. B. Pollard, Eutaw; H. L. Pearson, Dadeville; and duly elected members of the Association.

The hours of meeting were fixed as follows: Forenoon sessions from 9 to 12 M.; Afternoon, from 3 to 5; Night, from 8 to 10.

The meetings of the State Board of Dental Examiners will be from 12 to 2 P. M. and from 5 to 6 P. M.

The President appointed the following: Drs. S. Rambo, A. Ewbank and E. S. Chisholm, as an Auditing Committee, and referred to them the report of the Treasurer.

Incidents in office practice being in order, Dr. Dunlap read the following paper:

BOGARDUS.

On the night of November 20th, 1882, Eugene Bogardus, aged seventeen years, fell from a circus train, and was brought to Selma in an insensible condition. Early on the morning of the 21st, Drs. Furniss, Tipton and myself made an examination. Chloroform was administered partially, but was discontinued, the symptoms being unfavorable. We found a cut through the nose, a little below the right eye, through which the air passed; the lip sustained a ragged perpendicular cut, about an inch in length, on the same side. The right central and lateral incisors and cuspidatus, with the outer alveolar border, missing; the remaining alveola with the teeth entirely detached from the maxillary; the teeth and bone on the left side being depressed at least one-eighth of an inch; those on the right were depressed much more and at least half an inch inside the line of the original arch. This detached mass, alveola, teeth and palatine process, was divided by two other fractures into three pieces. The left containing the alveolar border, and all the teeth to the left of the median line, and the palatine process; the transverse fracture following the palatine suture. The right centre embraced the lingual border of the alveola, which was exposed to view from left central to right bicuspid and the palatine process; the fractures leaving this piece in a triangular

shape, the apex being in the posterior part of the hard palate. The extreme right contained the alveola and bicuspid, the fangs of first molar and second molar; this piece, from its mobility, evidently sustained a comminuted fracture. The lower jaw sustained a transverse fracture on the right side near the bicuspid teeth; the right central was driven through the bone, remaining impacted there, and I think the end of the fang protruded below, splitting the bone; the lateral cuspidatus and one or both bicuspids were torn out, with the outer alveola border. The cut in the lip was sewed up at this time, which I thought unwise, in view of the work I had before me, and it proved so when the impression was taken. Ten days elapsed before his condition justified any attempt to adjust the fracture. At that time the lower jaw showed some signs of being in the proper position, so our efforts were confined to adjusting the upper parts. A wax impression was secured and a strong silver plate swaged up and fitted, and to this a stout bar was soldered on each side, passing out near the corners of the mouth and bent back to conform to the shape of the face. Elastic bands were attached to the bars at one end, and to a skull cap at the other. When adjusted the pieces were seen to gradually resume their proper position, and the appliance seemed to give great comfort to the patient. The piece on the extreme right it was feared would have to be removed, as the fractures were too extensive and comminuted to justify a belief that the parts could be brought in apposition, and active suppuration had set in with indication of separation of the soft parts. After the splint was adjusted the young man was taken home. He left here sitting up, smoking a cigarette.

I have heard that he stood the trip well, and was recovering rapidly, otherwise I have not heard from the case, so can not report final results.

W. D. Dunlap.

Dr. W. R. McWilliams then read the following essay on the "Treatment of Exposed Pulps:"

TREATMENT OF EXPOSED PULPS.

Gentlemen of the Alabama Dental Association:

It is with feelings of some timidity I attempt to offer even a single thought, as regards the practice of our honored profession, since it seems to be the business of some, to hand us around without gloves. Yet, I think it the duty of all to contribute what they can, let it be ever so feeble, in pushing forward our practice to that high standard which will command the respect of the entire world. We have met for mutual good; perhaps one will be benefited more than another, then, let us hold sweet counsel together, for in counsel there is wisdom, in union there is strength. When King Solomon, the wisest man the world ever saw, chose wisdom as his portion, length of days was accorded him as one of the choicest added gifts which heaven could confer; and the elixir of life has been the dream of poets and philosophers from the days of the Chaldean sages, down to those of the alchemist and Rosicrucians who flourished some three centuries ago. Yes, poets have sung of its joys and sorrows, its brilliant fantasies and harsh realities. Moralists have sought to impress mankind with the truth that life is real and teeming with grave responsibilities. Then, if the latter be true, where will we find a brotherhood whose responsibilities are greater than ours? The answer comes back, no greater exist than those of the dentist. This fact meeting us face to face and sinking deep down into our reason, should we then not be willing to teach and be taught. Then let us be free to give our ideas, and as eager to receive from others, that our meeting will not be in vain, that we may return to our homes realizing that it was good for us that we attended the "Alabama Dental Association," knowing we are better prepared to contend with the many difficulties which come up in our every day practice. Of the many trying and sore troubles we so often meet with, I would beg leave to give you a few, as I deem, practical thoughts.

First, upon the dental pulp exposed. There is no operation in the practice of dentistry more worrying, especially to the

young dentist, than that of propely treating and filling a tooth when the pulp is exposed, so as to restore such a tooth to health; and even the older practitioner is sorely tried to know just what to do. The experienced dentist can nearly always, by looking at the decay in a tooth, tell whether or not the pulp is exposed. My practice is as follows: I excavate with all the care and skill I can, removing the decomposed dentine until I come to the pulp, and if I find it in a comparatively healthy condition, I at once adjust my rubber dam, dry out the cavity with soft Jap. bib. paper, taking a piece of spunk less than the cavity, saturate it with carbolic acid diluted just enough to hold it in solution, and place in cavity, allowing it to remain half a minute; take it out and re-saturate and replace in cavity, letting it remain until all pain has ceased. I then take up the acid left in cavity with a soft piece of bib. paper, and make a very thin paste of carbolic acid (same strength as first used), and the powder of English White Filling, and with a scoop excavator take up the paste and place directly over the pulp, then take up all the excess of acid with soft paper, wait two minutes, then mix the English White Filling proper, a little thicker than cream, and with the same excavator place this immediately on the mass already over the pulp, and as before, take up all excess with the soft paper. Again, wait two or three minutes, then mix the filling into the proper consistency and fill the entire cavity. Cover this with collodion, wax, varnish, or anything else that will protect the filling until hard, which takes place in thirty minutes. I then dismiss my patient until some future time, when I remove most of the filling and replace with the metal desired. However, before dimissing my patient, I always request, and try to impress the importance of keeping out of draughts. Keep the feet dry and comfortable for a few days. By carrying out these directions it is seldom, indeed, that I have any trouble at all. Yet, to be strictly honest with you gentlemen, I do, sometimes, have my patient return with tooth a little sore, face flushed, and pulse quite frequent. When this is the case, I at once take a small pellet of cotton and saturate with tinct. aconite root and place on the gum immediately over the fang

of tooth. Right here allow me to say, that tinct. aconite is a powerful palliative applied over the seat of any pain, especially such pain as I am describing, until I have a pretty deep blister. I then prescribe for my patient three grains saccharated calomel, to be taken in two doses. This seems to be a small dose, yet it is sufficient to move the bowels gently and start the secretions properly, and thereby reduce the quick pulse and correct the flush of the face. I can not recall a single instance where this treatment failed when the patient followed my directions. There is another condition we often find the pulp in. This is, when decay and disease has gone on until the patient is driven to the dentist with an aching tooth. In our diagnosis we find the pulp fully exposed, considerable inflammation, and some congestion. In such cases, I excavate, as before described, with all the care and skill I can; after all the decay is removed, I protect the tooth from the fluids of the mouth, and dry out the cavity, and with the sharp point of a nerve broach prick the pulp slightly so as to cause a slight hemorrhage. If I succeed in getting blood at all, I at once syringe out the cavity with tepid water, then wipe out the cavity with equal parts carbolic acid and tinct. aconite, leaving a very small pellet of paper saturated with same in cavity, and seal up until next day, when I fill as in first case, and treat same way if trouble comes up. There is another or third condition we find the pulp in. That is where even some suppuration has taken place. In such cases, I use tepid water until the cavity is well syringed out, I then apply carbolic acid and seal up from twelve to twenty-four hours, when I remove the acid, syringe out well, and take the Pure Golden Scale pepsin which is free from sugar, or milk, and with fresh glycerine make the pepsin into a mass and place in the cavity immediately over the pulp and seal up, allowing it to remain some time—six, twelve, and even twenty-four hours, when I syringe out the cavity well and cap as in other cases. Here I would say, I have never had anything to act as well as the pure pepsin. I have tried various medicines, and have met with better results with it than any other agents.

Next, I will give you my practice on alveolar abscess. My

treatment is about the same where there is a fistulous opening as where there is none, when I become satisfied the pulp is dead, and nerve canal is filled with pus. I will describe a case of central incisor. I excavate thoroughly, opening the pulp chamber, and, with a fountan syringe, wash all debris and pus away that I can, and then with a clean, flexible nerve broach pull out all accumulation I can remove, then use my syringe again with a very dilute alcohol a little warm. I then make a dressing of chloroform, tint. peletory and tinct. aconite root up well into the canal, leaving it lightly placed in the cavity until the next day, when I remove the dressing, syringe out well with dilute alcohol a little warm, adjust my rubber, and with cotton wrapped around a clean, flexible nerve broach, I fill the cavity with pure carbolic acid and pump it up into the canal. If fistulous opening, I keep up this process until I see signs of it coming through. I always have two or three of these broaches ready for use. If there is no opening, of course judgment must be used as to the amount. I then take very small ropes of bibulous paper and wipe the cavity out and repeat the syringing as above described. Where there is an opening the case is now ready for filling; though where there is none, I continue this treatment daily, until, in my judgment, the tooth is in a condition to be filled. I could go on, gentlemen, and give you my manner of filling such teeth, but fearing I will make this paper too long, I will close, by saying I have penned these thoughts under considerable disadvantages, yet, if I have succeeded in throwing out just one idea, my labor has not been in vain.

WM. R. McWILLIAMS.

The following communication from Dr. B. H. Catching was received, and referred to the Committee on Dental Education:

OFFICE SOUTHERN DENTAL JOURNAL,
Atlanta, Ga., March 20, 1883.

To the President and Members of the Alabama State Dental Association:

GENTLEMEN: I did hope to meet again with you this year and enjoy and profit by the wisdom of your councils; but the

South Carolina Association coming off near the same time, and wishing to attend it, will prevent the pleasure I had anticipated in meeting with you. I greet you as workers in the same cause, and send words of cheer for your comfort.

Dentistry, I think, is now fast becoming one of the specialties of medicine.

You have no doubt seen a notice in the Southern Dental Journal of the organization of the Chicago Dental Infirmary, which confers the degree of Doctor of Dental Surgery only on those who have graduated in medicine. This, I think, a step in the right direction, and will do more, if sustained, to elevate the profession than any college yet organized.

If you will allow a suggestion, I do not think it would be an improper act for the Alabama Association, by resolution, to endorse the plan, I do not say college, *but the plan.*

Gentlemen, we must look close after our institutions of learning. Many bad things are being said of some of them. As I stated in March editorial, it is a difficult matter to have the reports substantiated. Those who make them, seem to think, simply to make the remark is sufficient, when, if such reports be true, they should be made public. For the good of our profession, we want none graduated who are not qualified for the degree. Europe, a few years back, sent her students to this country to be educated by our colleges. Now, it seems, if things do not change, we will have to send to Europe for the best results. I am looking with great anxiety to the Chicago college, and hope it will be a lever to be used in elevating the cause of Dental Education.

Should you see proper, gentlemen, to select a journal as your official organ, allow me to urge the claims of the Southern Dental Journal. It is a home institution. Its influence is to be applied in building up Southern Dentistry. It is thoroughly established and prosperous, and if you deem it worthy of your patronage, it will respond to your calls, and Alabama, the mother of Dental Laws, will feel a pride in her own Southern Journal.

B. H. CATCHING, D. D. S.

The Association adjourned to meet at nine o'clock to-morrow morning.

SECOND DAY.

The Association was called to order by the President at nine o'clock.

The discussion on "Incidents in Office Practice" were resumed, and interesting incidents were related by Drs. C. A. Merrell, A. M. Rambo, McWilliams, Locke and Morgan.

Dr. Morgan then read the following paper on "Engorgement of the Antrum from Aveolar Abscess:"

ENGORGEMENT OF THE ANTRUM, FROM AVEOLA ABSCESS.

Mr. President and Gentlemen of the Association:

Wishing to contribute my mite on this occasion, I will report a recent case in practice.

On the 24th of February last, Mrs. C. herself was at my office for advice. She is a brunette, about forty years of age, five feet six inches high; will perhaps weigh one hundred and sixty pounds; bright, rosy complexion, with rather flabby muscles; a native of Tennessee. She gave the following history of her case.

A little more than four years ago had violent cold; suffered some pain about the face. Suppuration of a very offensive character soon manifested itself, the discharges from the nose occurring mostly in the forenoon. The pain now extended from the nose, when it was most severe, to the frontal sinuses, involving both sides of the face, also running up to the scalp and down the muscles of the neck, and also seriously impairing the use of the right eye. The symptoms gradually increased up to the time I was consulted. Mrs. C. had sought medical

aid, and her case had been pronounced nasal catarrh ; and after long continued treatment had been pronounced incurable.

So offensive had the discharges from the nose become, that she would permit no person, except members of her own family, to see her in the forenoon, considering herself, as she expressed it, a nuisance.

Last summer she sought medical aid in Philadelphia, where, after various consultations, it was suggested that her trouble might in some way be connected with her teeth. She then called on a distinguished dental practitioner and teacher of that city, who was inclined to the opinion that the Antrum of Highman was involved, but who seemed not very positive, and did not advise an immediate operation, so she returned to Nashville in October, without an operation, and delayed a visit to me, as recommended by my dental friend in Philadelphia, until January 24th following.

I found, on examination, two small roots, as I supposed, of the right, second, superior molar, both thrown forward and laying nearly horizontally in the gums, which, except in immediate connection with the roots, were quite healthy, the right nostril excoriated by the discharge, very red, and the breath very offensive. The absence of some of the universal symptoms of nasal catarrh assisted me in my diagnosis. I pronounced it engorgement of the maxillary sinus, and made a favorable prognosis. Placed the patient in the operating chair, removed the roots, found a small sack containing pus on one of them, which had evidently been discharging in to the antrum. I then with a small knife pared the margins of the cavity from which the largest root had been taken, so as to make a free opening into the sinus; then with a syringe carrying an ounce of water, proceeded to wash it out thoroughly; first with tepid water, and then with a little soap added. A mass of thick, greenish matter was thus washed out, of the most fetid character. As thorough an exploration as I could make failed to reveal any necrosed bone. For the first three visits, at intervals of forty-eight hours, I treated with tepid water alone; but the case did not progress as rapidly as I thought it should, consider-

ing the general good health of the patient, though the pains about the face had greatly lessened. The thin and offensive character of the discharges from the cavity, led me to suspect that there must be some necrosed bone at some point on the walls of the cavity, although I had been unable to find it. This led me at the end of two weeks to a more vigorous course of treatment. I then saw my patient every third day and alternated the treatment with tinct. iodine and carbolic acid, using of the former equal parts iodine and water, and of the latter, three parts water one part of the acid, mixing it in a glass by pumping it in and out of my dental syringe, and throwing it into the antrum in that condition, so that the medicine should reach all parts of the cavity. I also gave my patient a small syringe and let her rinse out the cavity every morning with tepid water; after two weeks lessened or omitted the medicine according to symptoms. The improvement under this course of treatment was comparatively rapid. Two or three slight colds retarded the case, as also did too much exercise on several occasions.

On the 4th of April I discharged my patient entirely well, save occasional pain about the face, especially in the frontal sinuses and the region of the ethmoid bone; still some little weakness of the right eye when much reading or writing is done, all of which I expect to subside as the facial nerves regain their integrity.

June 10th. The patient has continued to improve to date so that the pain has almost entirely ceased.

W. H. MORGAN, M. D., D. D. S.

Dr. McAuley related a case of neuralgia, and asked for suggestions; to which Dr. Morgan responded.

Dr. Geo. Ewbank related a case of mercurial poisoning, and his treatment.

Dr. A. Ewbank detailed the circumstances attending a death from chloroform in his office. The chloroform was administered by a physician (another being present), under protest, and death entered before the tooth could be extracted.

Dr. Chisholm thought that many accidents charged to the use of anasthetics were really the result of other causes. He relates a case in which a physician administered chloroform, which was followed by vomiting a large quantity of roasting-ears which the patient had eaten, and which might have choked her to death; for the physician who administered had given no previous instruction to abstain from much solid food.

Dr. McAuley mentioned a case where nitrous oxide failed to produce anasthesia, though given in large quantity; does not allow the use of chloroform in his office.

Dr. McWilliams does not like to have it used in his office.

Dr. Dunlap read the following paper on

TOBACCO AS AN IRRITANT IN CANCEROUS AFFECTIONS.

Case 1.—Some eight or ten years ago a lady past the meridian of life called on me to insert some teeth for her on a gold plate. The roof of her mouth had, here and there, patches of what seemed to me to be warts. They presented the appearance of having been scalded; the mucus membrane in the vicinity of this growth was colorless; yet there was a ragged edge to each of the excrescenses that excited my suspicions, and induced me to advise her to consult a physician. This she did, and in the examination we learned that she had no uneasiness or trouble in the parts, if we except a little tenderness now and then. She was an inveterate smoker of the pipe, using a very short stem. She was told that some of the indications were those of what is called smoking cancer, and that she must give up the pipe. This she positively refused to do, remarking that she would rather die than give it up. I then fitted her with a partial plate, with clasps, cutting it away freely to avoid contact with the suspected parts. She returned to her home in an adjoining county, and in a few months, perhaps a year, she died of cancer—smoking cancer, so-called.

Case 2.—Some four years ago a physician in a neighboring town asked me to examine the mouth of one of his patients—

that he had been treating him for some time for a sore mouth without success. The patient was a German about thirty-five years old. I found the lower jaw on the right side without teeth, and the gums in an œdematous condition, presenting much the appearance of having recently undergone extraction; nodules here and there, presenting the appearance of unabsorbed aveola; there was great inflamation, with a thin serous discharge, and the man was suffering greatly with lancinating pains. Learning that the teeth had been extracted years before, and believing the case to be malignant, I advised him to put himself at once under some reliable specialist. This coinciding with the views of his physician and his family, he went to New York soon after, was operated on by Dr. Agnew, I think, and in a week or two he died of what was designated a "smoking cancer."

Case 3.—A gentleman about fifty years old presented himself for some work last summer. His complexion and skin gave the usual indications of scrofulous tendency. His cheeks and parts of the lips, alveola and tongue were covered with white patches, that seemed to have been devitalized by scalding. I learned that he often suffered with sore mouth, and was accustomed to apply nitrate of silver in solution to the lips and tender spots, carrying a vial in his pocket for that purpose. He was an inveterate smoker. I spread the facts of his danger before him, and being backed by his physician, prevailed upon him to abandon smoking. His mouth soon began to improve, and to-day is much better than it was a year ago. There are still some unfavorable signs, the spots remaining, though not so tender; yet his teeth being much worn, I find very stubborn in yielding to treatment. This, I think, of itself important to notice in such cases. I fear there is trouble ahead; but there has been so much improvement that we are led to hope that in his case cancer will not be developed.

Case 4.—A gentleman about seventy years old, lymphatic temperament, very fleshy, presented himself a few months ago in my office, face swollen on the left side, complained of his

teeth in the lower jaw. I found them sound, bearing percussion and cold water without pain; found a tumor adhering to the lower maxillary. I extracted a few fangs from the upper jaw, at his request; but not with any design to relieve him of his pain. He suffered greatly, both night and day, consulting me several times. Knowing his habits, I feared that smoking had been instrumental in developing cancer; that it had already developed in a malignant form; and later I refused to extract a tooth that he suspected to the last. A physician finally cut into the tumor, when sloughing set in, and he soon died.

The first three cases were epithelial in character, but the latter was more of an enrephaloid growth, and was designated by one of his physicians as "ostœ sarcoma."

The opinion prevails to some extent that smoking will develop epithelial cancer, but its effect is more obscure on the latter; yet from my knowledge of this case, I am strongly led to suspect that smoking developed this also.

The case of the Hon. Ben. Hill, of Georgia, is fresh in the minds of us all, and is recorded as "smoking cancer."

Engaged as we are from day to day examining mouths and working on the teeth, we have a rare opportunity to discover the symptoms in their early stages, and I have brought these cases to your attention to impress you with the importance of the subject, and hope that we may learn more of the treatment that is needed. I understand that smoking cancer differs in no material respect from ordinary malignant cancer, but is so called as the habit of smoking was instrumental in developing it, by irritating the tissues, or by absorption of the poison.

One fact further: All these cases smoked short-stem pipes, and were constantly smoking. Possibly by an early discovery and warning, the lives of such cases may be preserved; but it must be done before the fires are lighted that transforms it into a malignant shape.

Dr. Dunlap, Chairman of the Committee on Clinics, made the following report:

REPORT OF COMMITTEE ON CLINICS.

The Committee on Clinics beg leave to report that there should be a radical change made in the clinical work of the Association. The present plan affords very unsatisfactory results. Members anxious to have their teeth operated on, secure an operator and take the chair at the proper time; but the hour soon passes away, yet the work goes on; a group, large or small, looks on; the regular work of the Association is forgotten. Several of such groups are similarly engaged, and but few are found in attendance upon their duties in the Hall. While this goes on, there may be but few cases that present any marked peculiarity taken in hand. To obviate the evils growing out of the present system, we offer the following resolution:

Resolved, That the Committee on Clinics be placed in charge of this division; that it shall be their duty to provide a suitable place or places, select or approve cases and operators, and have the operations as varied as possible; and each member is invited to aid the committee, by submitting peculiar cases to their inspection; and operators having any new plan or device, desiring to demonstrate their usefulness, shall first submit them for the committee's approval. Also, that the committee be empowered, under proper instructions, to secure the services of one or more Clinical Instructors, for which a suitable fund shall be provided; that parties desiring to operate should bring their own instruments; that the provisions of this resolution shall be put into operation at the close of this Session.

Resolved further, That the third day of the Session be set apart for clinical work; this rule to take effect at once.

We would call your attention to the necessity of remaining in session at least four days, if we do our work thoroughly; and as we have usually adjourned on the third day, if the above resolution should be adopted our time must be extended.

W. D. DUNLAP,
Chairman Clinic Committee.

The report and resolutions were adopted, and ordered to be spread on the minutes.

On motion, Clinics were suspended for this session.

The following paper was read by Dr. Dunlap:

DR. MARSHALL H. WEBB.

You have doubtless read the obituary of this distinguished member of our profession. Some of us had the pleasure of meeting him at the Atlanta Exhibition, and witnessing a clinic with the Electric Mallet. He impressed us with his zeal, gen-

tleness and unselfishness; firm in his convictions and thorough in his operations, enthusiastic in his theories, we found him a genial gentleman, and considerate of the claims of others. He was one of the finest operators in the United States, and a writer of distinction. Whatever he learned he gave freely to the profession; in fact, much of his time was freely given to advancing her interests.

We are informed that he left his family unprovided for, and an effort is being made to raise a testimonial fund in behalf of his family. I have promised to lay the subject before you and ask your aid in this good cause. This I cheerfully do, and hope that all will contribute something, be the amount ever so small.

W. D. Dunlap.

On motion of Dr. DuBois, the Association appropriated thirty dollars as a testimonial fund.

Dr. D. A. Brown, of Conecuh county, was admitted to membership.

Dr. Locke, Chairman of Committee on Operative Dentistry, read the following paper:

Mr. President and Members of the
Alabama Dental Association:

In the beginning of this response to your appointment, I will state that I shall make no attempt at learned display, nor a labored effort to show that I am perfect in the art of operative dentistry. Nor will I weary you with a very lengthy communication. It shall be my purpose to give you a few of the difficult cases of my office practice—my treatment, and the result.

In the first place, it is highly necessary that the operator shall be honest with himself and with his patient. When a case presents itself, he should be careful in examining the case, and make out a well defined diagnosis before he proceeds to do any work. If only simple caries are to be excavated and filled, your course is plain before you. Be sure that all the decayed parts of the tooth are thoroughly removed; prepare

your retaining points, and then be careful in putting in a perfect filling of whatever material your judgment may dictate—using at all times the filling material that will best preserve the tooth. If you find that the nerve of the tooth is exposed, then look well to the surroundings; and if you can excavate the tooth and leave the nerve uninjured, or even touched with the excavator, and hemorrhage ensues, my experience is, that it is best to cap the nerve with some of the plastic fillings (I generally use Caulk's Cement), and then fill the cavity with gold or amalgam. The latter, be it noted, should never be put in the front teeth. Or if you find that the nerve is already dead and no abscess formed, treat the canal with carbolic acid or creosote, until it is clean and free from all offensive odor; then fill the nerve canal with any of the plastic fillings (in this case I use C. C.); then in the ordinary manner fill the crown, and the tooth is, to all intents and purposes, a good tooth.

Again: If there is an abscess, with a fistulous opening through the gum, treat as above, forcing the creosote through the apex of the tooth into the abscess. Continue this treatment until the abscess is cured, the tooth clean and free from offensive odor, then fill the nerve canal with any material that you may choose (I prefer the plastic), and then fill the crown as you would in ordinary cavities.

About the 5th of last May, Mr. G. D. Reid, the business manager of the job printing office in my town, applied to me to have his teeth fixed up. On examination of his mouth, I found them in a very bad condition; the two left front teeth were badly decayed, points broken down, the nerves dead and abscess formed; from the lateral a fistulous opening was formed in a few days, from the central an abscess was formed, far up in the roof of his mouth; one of the superior bicuspids was dead and an abscess formed, and several other teeth were in a badly decayed condition and his gums very much inflamed. After a thorough examination, I advised him to have them all taken out and an artificial set put in. This he declined to do, saying that he wanted me to treat and fill them. Reluctantly

I consented to do so, and commenced the treatment. I first excavated the crown of each of the teeth, then opened up the nerve canals as best I could, and treated with carbolic acid, by taking a thread about two inches long saturated with carbolic acid and with a smooth broach forced it up in the canal, and thus left it for a few days. I also painted the gums with iodine. I continued this treatment from time to time until the abscesses were cured, the teeth clean and free from all offensive odor. I then filled the roots of the teeth with floss silk saturated with carbolic acid, and the crowns with a temporary filling. Thus these teeth stand to-day. Mr. R. informed me a few days ago that he had never had any trouble with these teeth since my treatment, and that they were as good as they ever were. This is case No. 1.

Case No. 2—Was a lady whose teeth were giving her some trouble. She called to see me, and, on examination, I found that the left central and the right lateral incisors were the seat of the trouble. I found that the nerves were devitalized, and abscesses had formed, but there was no fistulous opening. I treated them as I had in case No. 1. She suffered a great deal during the night; the next morning she called at my office and I found that pus had accumulated above the central tooth. I lanced it, and it discharged quite a quantity. I again treated both teeth with carbolic acid. I could not force the smallest broach to the apex of the lateral incisor. The consequence was that I could give no ease, and the pain was so great that she insisted on having them both extracted. I found the lateral to have a very long, small root from the apex up, about one-fourth inch with no cavity through which I could force any thing.

It is claimed by some that they never fail in successfully treating these teeth. It is, however, my candid opinion, that there is no way of treating them through the canal, and that the only certain remedy is that of trephining; and even this with great doubt may be attempted. There are, furthermore, but few who will submit to the treatment.

Case No. 3—Was a young lady from the country, who came

to have cavities re-filled in a central incisor that had been filled two or three times by another dentist. On examination, I found that the nerve was dead and the tooth very frail; I could not enter the nerve canal through the proximal cavity; I drilled into the canal from the inside of the tooth, thus securing a direct opening into the canal. I then filled the original cavity with gold, and commenced treating the nerve canal as above.

Time would fail me to go through and itemize all the cases of diseased and devitalized nerves that I have treated. The result has been as satisfactory as could be expected. I do not now remember a single failure after the tooth was filled. I have thus far tried to be conservative in my remarks as to the filling material used. On this I fear some dentists are rather narrow in their views, and sit down with a very great deal of severity on amalgam and all other plastic filling material. In my opinion, there is nothing equal to gold in a large majority of cases, but there are cases, and not a few of them, in which amalgam is far superior to gold. Take, for instance, a large molar or bicuspid with a large simple or compound cavity, with very frail walls, nerve nearly exposed. I am bold to assert before this intelligent body of dentists that in nine cases out of ten of this sort amalgam is the better material. Nicer and more perfect work can be done with amalgam than with gold. In all jaw teeth, with large approximal cavities, the most of us can put in a better filling with amalgam than with gold; and if the work is well done, it will answer as good a purpose as gold, preserve the teeth as long and do as little damage.

Amalgam is the only plastic material now known to me that I can recommend as a permanent filling. If the time ever comes when the cements, gutta percha, and the different zinc compounds, one or all of them, are so perfected as to be thoroughly reliable as a permanent filling material, which I confidently expect, they will take the place of gold as a filling for all the teeth. They will take the place of gold as dental gum has as a base for artificial teeth.

Great and grand advancement has been made in the practice in the last few years, but it is only well begun. It will go on more rapidly now than it has in the past. It is my opinion that there are men now practicing dentistry—yea, men in this Hall—who will live to see the time when gold fillings will be the exception, and not the practice. I know, Mr. President and gentlemen of the Association, that these views of mine are unpopular, and that you will pronounce it unwise, and even foolish in me to assume this position; but I have only to say to you, wait and see—and see you will. As it was in the plate work, so it will be in operative dentistry—the plastic will take the place of gold.

Dr. Locke's views were discussed by Drs. Merrell, Morgan, Saunders, George Ewbank, West, Johnston, Robertson, and Dunlap.

On Education and Literature, Dr. A. Jackson read the following:

DENTAL EDUCATION.

Artemus Ward, better known to some as "Old Waxworks," conceived the idea of killing his rival by reading his lectures to him, and intimated that he would expire before he had half finished reading them. This idea suggests a valuable expedient to me in the present crisis. As my name did not appear in the published proceedings of the Convention of last year, I concluded that Dr. *Manifest Destiny*, or some irrepressible reformer, had improved upon the wisdom of the Convention by leaving me out of the programme for the present occasion. This impression was not removed until it was too late for me to make the careful preparation which my subject demanded. Feeling reluctant to appear before such a talented body without adequate preparation, I was at first strongly inclined merely to state the untoward circumstances, and say to you, in the language of Scripture, "I pray thee have me excused;" but, tempted by the wicked suggestion of Ward, I thought that I

might get rid of some of my dangerous rivals in the profession by torturing them to death with a *poor* paper, and, with an eye to the main chance, I then decided to embrace the opportunity.

The genius of Chaucer furnishes a beautiful allegory, that may be employed to lead the way up to my subject. The poet's fancy transports him beyond the moon and the stars, and puts him down before the Temple of Fame. This grand edifice, built of emerald, with shining towers and gorgeous columns, rests upon an immense iceberg, which is high and difficult to climb. The southern side of the iceberg was inscribed with the names of men who had been famous in art, science and literature, but being exposed to the heat of the sun, they were constantly melted away. On the northern side, where they were protected against the heat of the sun, the names remained legible and permanently graven. The poet enters the temple, and a gorgeous and magnificent scene greets his eyes. In a spacious apartment, lined with gold and studded with pearls, on a glittering throne, sits the Queen of the Temple. Around her stand the pillars, upon which are inscribed the greatest names known to art, literature and science—those who climbed over the iceberg, and left their names where they would not be melted away. The allegory of the poet teaches us an important lesson. It teaches that the road to learning is not over level plains nor smooth Appian ways, but over icy cliffs and rugged promontories. To secure the acquisition of knowledge, there must be effort, and the more profound the knowledge, the greater must be the effort.

Skilled brain power and the treasures of a well-stored intellect are not the heritage of man. He has the power to think, to reason, to master difficult problems, to search into the secrets of nature, and to penetrate the mysteries of science with his keen intellect; but all these require thought, research and unremitting effort. The practical application of this doctrine enabled an obscure Corsican to rise, like a giant from his lethargy, and seat himself on the throne of the Bourbons; it enabled Lord Nelson to decree at Trafalgar that proud England should still be mistress of the seas; and it enabled Cæsar to make Rome

so powerful she could sit on her seven hills of beauty and rule the world. It enabled Michael Angelo to carve the beautiful form of an angel out of an unsightly rock; Raphael to spread upon canvas his immortal Madonna; and Leonardo to signalize himself as the genius who could grasp art and science with hitherto unknown power. It enabled Virgil to tune his lyre to the praise of Æneas in the sweetest melody; Homer to sing of the exploits of his countrymen in immortal song; and Milton to portray in sublimest verse the daring sacrilege of the fallen angels. It enabled Humboldt to advance to the foremost rank of the world's great scientists; Agassiz to tell, by examining a sea-shell, the age in which the animal lived that inhabited it; and Cyrus W. Field to *perfect* the magnetic telegraph—that wonderful agent by which a man sits at his table in New York, and talks with another who is far beyond the broad Atlantic. The epitome of wonders is not yet exhausted. It has given to Chemistry the power to seize great secrets from the laboratory of nature; to Engineering the skill to cut railroads through rocky mountains and under deep streams, to build suspension bridges over broad rivers, and to connect remote seas by artificial channels; and it has given to medical science the remedies to heal malignant disease and mitigate human suffering.

Skilled brain power, combined with diligent research and concentrated effort, has achieved marvelous results in our profession during its brief existence. While it is but yesterday since it sprang into being, yet the discoveries it has brought to light, and the mechanical contrivances and remedial agents it has summoned to its aid, justly entitle it to claim equal rank with any of the learned professions. In speaking of its brief existence, we do not wish to be understood as disputing the facts of history bearing upon its origin. Dentistry, in some form, probably existed as far back as the mythic period of Greece. Upon no other hypothesis can we account for the fact that the old classic poets, Ovid and Horace, speak of it. I may add, too, that mummies have been found in Egypt, and skeletons have been taken from the tombs of the ancients, which showed the handicraft of the dentist. In this instance, we are

not led to exclaim, "hark! from the tombs a doleful sound,"—but hark! from the tombs a *significant* sound. The conclusion to which these facts point, is, that some attention was paid to it in the earlier ages of the world, but what was known of it as a science perished beneath the torrent of Goth and Vandal ignorance, or went down in the night of time. Its secrets were left buried for a long period, and not until the present century were they brought to light again. John Hunter contributed much to this result by his learned treatises, and thus laid the foundation of the Dental School of England. The French dentists made wonderful progress in the profession about the same time, and their scientific researches have brought valuable aids to its development. But to Leonard Kroecker, of our own country, is due the credit of causing it to take rank as a distinct profession. He practiced dentistry in New York soon after the revolutionary war, and his scientific lore and mature experience caused it to shoot forth, like a meteor, in a blaze of splendor. Since then it has always ranked as a separate profession. It now stands upon an equal footing with that of the Aurist, the Oculist, and the Medical practitioner. Its claims to scientific recognition have been placed beyond all question, by the schools of learning it has established and the valuable discoveries it has given to suffering humanity. Science is the keystone upon which it rests. It calls to its aid anatomy, philosophy, physiology, mineralogy, the secrets of chemistry, and the principles of mechanism. These great agencies are the talismanic sounds that have lifted it into an elevated position in the minds of the intelligent and educated, and to them must we look to sustain its well-earned prestige. The rise and progress of dental science, its aims and results, are interesting, not only to members of the profession, but to all persons of inquiring minds and liberal culture. During our war of Independence, there was only one dentist on the Western Continent, and he was one of the noble Frenchmen who came to the rescue of the colonies in the most critical hour of their fortunes. When George Washington was President of the United States, there was but one in the great city of New York, and to his honor

be it said, he prepared a full set of ivory teeth for "the Father of his Country." When Alabama was admitted into the Union, there were only one hundred in all the States. Now the aggregate number reaches far up into the thousands, and they are found in almost every city, town and hamlet of the thickly populated portions of the country. This statistical exhibit is pregnant with meaning. It shows the level of the times, and that, so far as public favor is concerned, we are fully abreast of our sister professions in this age of progress and scientific lore.

Much of our progress has been due to our schools and colleges and to our State and national conventions of dentists, by means of which we are educated in the latest discoveries of science. Another great cause of our progress results from the fact that our attention is mainly directed to the treatment of a single organ. The chief reason why more is not accomplished in the learned professions, is because mental power is not concentrated upon special branches. Men achieve but little, because their labors are diversified. The road to success is through specialties. Mental power, like a large stream, wastes its forces when spread over a vast surface, but when concentrated, it sweeps onward with the momentum of a mighty cataract. Our age is too complex for one man to master learning and grasp all the sciences, but if he knocks with resolute hand at the doorway of a special branch, he has strong reason to believe that "to him that knocketh, it shall be opened." "The man that seeks but one thing in life, and but one, may hope to achieve it before life be done."

Although the French, English and American schools of dentistry have done much to acquaint us with the secrets of first dentition and the diseases that accompany it, as well as the different subjects relating to the prevention and cure of the diseases of the teeth; yet the rapid progress for which we are indebted to them, can be better illustrated by referring to the improvements in mechanical dentistry. It appears from the advertisements of old newspapers that this branch of our profession was once in the hands of jewelers and silversmiths, but our handicraft has set at naught this branch of their business as

effectually as the mission of the Apostle Paul set at naught the trade of Demetrius, the silversmith, and his fellow-craftsmen.

We shall now notice some of the improvements which our dental schools have bestowed upon the world. The primitive method of fastening teeth by ligatures and flax, has given way to the method of securing them by metalic clasps and spiral springs, and these, in turn, have been supplanted by the excellent method of securing them, in whole or in partial sets, to a plate of gold or vulcanized rubber so accurately fitted to the gums that they are retained by atmospheric pressure. Teeth which were formerly made from the tusk of the elephant and the tooth of the hippopotamus, and which became offensive, and, owing to their susceptibility to the action of the fluids of the mouth, induced disease in sound teeth, have, under the combined skill of the dentist and chemist, been supplanted by teeth made of porcelain, which effectually resist both, and imitate the natural teeth so perfectly, it requires a sharp eye to distinguish them. "Them pullies" which, in the hands of an ignorant ditcher, with no other qualification than the muscular power to wield them, made the extraction of teeth dangerous, have been displaced by superior instruments, by means of which teeth are now extracted with skill and safety by the professional operator.

Among the many ingenious contrivances which modern dentistry has called to its aid, we may mention automatic mallets and drills worked by treadles and galvanism as a motive force, for preparing cavities and filling teeth; also, the process called continuous gum—colored by mineral oxydes to imitate nature—and cheek restorers, which serve to distend the cheeks when they have fallen in. Since the contrivances of modern dentistry have been brought into requisition, there is no longer any necessity for the old maids to replace their lost teeth with waxwork of their own manufacture, for, though one be toothless and hollow-jawed like the old gypsy, Meg Merriles, yet the dental surgeon who is up to his business can supply her with mouthworks which even the beautiful "Jersey Lilly" might well

covet. The Eastern Magi, in their wildest flights of imagination, never conceived such wonders as these.

We have alluded to the fact that some of the Egyptian mummies—three thousand years old, perhaps—have artificial teeth fastened on metalic clasps. When Mark Twain was in Genoa, seeing that his guide took great delight in exciting admiration, he resolved to play off a joke on him by maintaining a stupid indifference in the presence of the sublimest wonders that were shown to him. After this, the guide nearly walked his feet off hunting up extraordinary things, and taxed his ingenuity to the utmost to excite interest in him; but it was a failure. The greatest wonder, a royal Egyptian mummy—the best preserved in the world—was reserved to the last; but that, too, was viewed with stolid indifference. If, however, it had been supplied with the best specimens of modern dental work, such as continuous gum, cheek restorers, and porcelain teeth secured on a gold plate so well fitted as to be kept in place by atmospheric pressure, we are fully satisfied the humorist would have lost his self-possession, and gone into ecstacies over the wonderful curiosity.

The importance of dental education becomes more apparent when we consider that its prime object is to relieve pain, and promote the health and happiness of the human race. Owen Meredith tells us we may live without poetry, without music, without conscience, and without books, but we can't live without cooks. To this may be added, we can't live and enjoy health without teeth to masticate the food the cooks prepare; and without health even the dreams of romance and the splendors of kingly magnificence can not be enjoyed. "O, blessed Health! thou art above all Gold and Treasure." The machinery of man is so delicate, so complicated, and so nicely adjusted, that the disease of a single nerve will throw his whole organism out of order, and thus prevent the parts from performing their functions. It is the province of the dental surgeon to minister to some of the worst of these nerve disorders, and prevent and cure their racking torture. "*Ton odontos to achos*," or tooth-

ache in its worst form, is one of the most malignant of these nerve disorders.

The poet Burns, in his "Address to the Tooth-ache," says:

> "When fever burns, or ague freezes,
> Rheumatics gnaw, or colic squeezes,
> Our neighbor's sympathy may ease us
> With pitying moan;
> But thee, thou hell of all diseases,
> Ay mocks our groan!"

We have heard of martyrs being burned at the stake without faltering, of kings and princes who showed heroic fortitude under the executioner's axe, but we have never heard of any one who could bear a severe tooth-ache without showing signs of intense agony. Even the philosophers can not bear it with patience, although they have made a "pish" at pain and suffering, and written in the style of Gods.

Our dental journals, our schools and colleges, and our State and national conventions are fine media for disseminating knowledge and communicating the improvements in our profession, and they have accomplished much in their respective departments. A high tide of success has left its unmistakable marks, but the moon is not full, and the highest tide has not yet been reached. However incredible it may appear to some, we have, in the researches of our profession, probably been imitating Isis, who hunted and gathered up the limbs of the good Osiris, after they had been hewed into many pieces by the Egyptian Typhon and his fellow-conspirators, and scattered in unknown places. We have gathered up many parts which had, perhaps, been hewed to pieces and scattered by the rude hands of Goth and Vandal when they laid waste Europe, but there are still others that we may collect by careful search and mould into our beautiful system. Many valuable secrets still slumber amid the mysteries of chemistry, and much may yet be done to relieve human suffering. In a better way we may yet learn how to stop the flow of blood, how to reduce inflammations, how to remove purulent matter, and how to repair and correct the deformities and distributions of nature.

Ours is a noble and honorable profession, and our mission is one of mercy and humanity. It behooves us to work earnestly and zealously to raise it still higher on the pillars of science, and to elevate its ethical and humanitarian standard. There may be no temples erected to pay us Divine honors, such as were paid to Æsculapius, the legendary father of surgery; there may be no Homer to immortalize us with such songs as he sang of Machaon, the surgeon who accompanied Agamemnon in the Trojan war and ministered to the wounded Grecian heroes; but let us remember that there is an aristocracy of talent, and

> "Who e'er amidst the sons
> Of 'Science,' Valor, Liberty, and Virtue,
> Displays distinguished Merit, is a Noble
> Of Nature's own creating."

Taking as our motto the fine sentiment of Terence, "I am a man and all things human touch me," let us press onward and upward, and, with compassion in our hearts, make it the thought, the wish, and the dream of our lives to help and to heal the sick who lean on us in their afflictions.

A. Jackson.

On Voluntary Essays, Dr. Dunlap read a paper denominated

MY FAILURES.

This truly is an age of rapid and wonderful progress—all the resources of art and science are laid under tribute to hasten the time when we may exclaim "Eureka!"—and it really seems that truth in all its beauty must perforce surrender to the combined powers of investigation. But ever and anon it may be well to take a retrospect, and see if all we claim is based on the solid foundation of truth; otherwise it may be that, after weary hours of toil and trouble, and days of study cheered by bright visions of success, we may have to retrace our steps and climb again the rugged path to knowledge. There is every day and hour a demand for something new, and the demand must be supplied, let the cost be what it may; old things and methods

are ignored, and but little can be found that is not gilded and burnished until it shines as the noon-day sun, all novelty and glitter. It would ill become us to deny the good that have these qualities added to real merit, except in cases where good taste is violated for the sake of show. The efforts to produce something new have imperceptibly led us to ignore much that is good in the old. In fact, we have a new Code—a ponderous volume—an encyclopedia that contains directions in full how we may grapple with the fell destroyer, and invariably overcome him. The new rules are inflexible, the results are certain, there can be no such thing as failure. This volume is placed in our hands—we devour it gredily, and find it sweet to the tongue but bitter to the belly; for alas, failures are as frequent as ever, unless perchance the authors of these modern ideas do the work.

We now have the Plastic or "New Departure" theory—the Cohesive and Contine Filling—the Pivot Tooth—the Electric Mallet—the new Alloy Base Plate—the Gold-lined Vulcanite Plate—and many other inventions; all and each are spread out before us as the one thing needful. Amidst this rush for new things, the writer would ask you to pause a moment, and remember that "all is not gold that glitters." He realizes that with a large and varied experience, he has found no high road to knowledge, and no infallible rule in any branch of our art; he therefore feels justified in selecting for his theme—

MY OWN REPEATED FAILURES.

Perhaps a portion of these failures may be familiar, here and there, to some of you. If so, the writer may discover some sympathising friend or friends into whose ear he can whisper his troubles and trials—men of like infirmities. We would not remain alone—alone in the solitude of the forest or wilderness—alone on the highway—alone in the midst of the teeming multitude —alone on the battle field—alone between two contending forces, liable to be ground to powder between the upper and nether millstone—alone in weakness—alone in failures. May the powers forbid, and in charity remove the veil from our eyes.

Mayhap we will see that they that be with us are more than them that be against us.

The dental literature of the present day is largely composed of laudation of pet theories, so much so that a disinterested stranger would be impressed with the idea that the upper rounds of the ladder of fame were well crowded, and the aspirants for honors would have to be content on the lower rounds, if he wanted room; he would come to the conclusion that there is no longer room at the top. But to encourage the weak, to whisper a word of comfort to the faint hearted, and to support wavering, we bid you look up and take hope, for the race is not always to the swift, nor the battle to the strong. There is yet room, and plenty of room at the top. Perfection should be our aim, but we should beware how we lay claim to having attained it, lest some bright ray of truth from the great source of knowledge should reveal to all around a mass of ignornnce, vanity and error.

Turning from these preposterous claims we will now devote a short time to things of a personal character.

MY OWN FAILURES.

Beginning our career as a dentist during the reign of Soft Foil, and in the midst of the celebrated Townsend controversy on amalgam, with not an educated dentist any where in reach, the duties of a practitioner were assumed. We soon found that we had failed in laying in a Technical education; that we had not learned either theory or practice, nor could we apply them the one to the other—first and most important failure, in this day inexcusable. An office is opened, and the public invited to bring their ailments for treatment. Now all the ills that flesh is heir to—through the dental organs—tooth-ache, abscess, periostites, neuralgia, salivation, syphilis, dyspepsia, ear-ache, deafness, &c., come trooping in solid phalanx, asking aid from our small stock. Some are treated with simple remedies, others dismissed as trivial and transient ailments, while the remainder are turned over to the medical practitioner as belonging to his department. As to remedies, let us see how they work. A

case of tooth-ache presents itself; something is applied, the pain is stopped, and the patient dismissed without a word—the present trouble is bridged over. Another case on hand; extraction is requested. Without a careful examination as to the requirements of the case, at it we go—usually with success, but often failing; the crown crushes, leaving the fangs, or it may be a portion of one or more, deep seated in the aveola. Trusting to the expulsive powers of nature, we conclude to let them remain; some times they give no annoyance, while at other times they cause great suffering. Where relief is not afforded by these efforts, I record failure again.

Now, if it were possible to restore these teeth to a normal condition, and the patient were both able and willing to have it done or attempted, I have more signally failed to do my duty. Why? Because the first, therefore the most important, duty confided us is the "conservation of the teeth." 'Tis true that in many instances extraction may be necessary; but when it is not called for by plain and unmistakable terms, I may properly blame myself for doing it, and feel again that I have made a failure.

Now let us see how the matter stands with another case that presents itself. The patient comes in hurriedly, suffering greatly, and asks to have a tooth extracted. A hurried examination reveals extensive decay; no question is asked, no suggestion is made, but the offender is removed. In a day or two the patient returns, and another tooth is taken out; but the third time he comes back designating another. Perhaps by this time a faint idea is growing in the mind of the sufferer that he will sadly miss so many teeth, and asks that an effort be made to save this one. It is done, with seeming good results. Now a disagreeable suspicion floats through my mind, that the latter tooth has been really the offender all the while. 'Tis true the others were in a bad condition, but were probably in better condition to treat successfully than the latter. If this be so, I must record failure again—knowing my duty, I did it not. Perhaps I console myself with the idea that I only did what I was asked to do. So far true; but responsibility requires that

every other remedy shall be exhausted first. The patient should have been advised as to the importance of the organ for mastication, &c., and the probabilities of restoring its usefulness, the time necessary to treat it properly, and the probable expense. These things should be plainly set before the sufferer, and, with his consent, the effort honestly made. By so doing, I avoid reproach for failure. We have now before us a trial of judgment and skill in an effort to restore the tooth to a healthy condition. What shall the treatment be? The choice lies between extirpating the nerve, in part or in whole, or by treatment restore it to health, and judiciously fill. Perhaps I decide to destroy the nerve; arsenic is applied, the nerve removed, the canals enlarged, and an effort made to fill from apex to crown. In one the filling does not reach the apex, leaving an opening for the retention of fluids which eventually decompose; in another, a portion of the filling is forced through, and there remains to irritate the surrounding parts. Some times nature tolerates these conditions wonderfully, and no trouble ensues; but often trouble does ensue. The tooth is treated for a time, but has finally to be removed. Growing out of the numerous failures following this treatment, and a desire to find something better, close attention is given to treatment that may preserve the nerves in health. These efforts are confronted with many difficulties—the greatest, perhaps, being the want of knowledge as to the exact condition of the nerve, either before, during, or after treatment; but I try the plan—subdue the pain, release pus, and stimulate the nerve to throw off disease—every thing seems favorable. I then fill, but to find out sooner or later that either I have made a mistake as to condition, or have committed a blunder in mode or manner of filling. So, in this line I find failures of frequent occurrence. I am somewhat reconciled to this experience when I remember that I can, as a last resort, try the first plan, thus giving the tooth two chances.

Now we have not related all the failures that ensue from either plan, although a large majority of such operations may be classed as a success, as they are not heard from again. Yet even among those classed as successful, I am satisfied if I knew

their history I would be less confident of their success. Then in plain and compound fillings, here and there, now and then with napkin, spunk, bibulous paper, or rubber dam, with gold, soft or cohesive, singly or combined, with amalgam, gutta percha, or any of the cements, with wedge-shaped or serrated pluggers, hand-pressure or mallet, a filling fails through some fault of mine—I can not hide it from myself—yet how is it that I am alone in this experience.

It falls to my lot to have a child put under my care at an early age, the teeth are soft, I clean and fill, give careful directions as to how best to preserve them, and the directions are carried out; every six months I examine, fill, file and clean; but alas, one and another of the teeth give way, and finally, perhaps long ere middle age has been reached, every tooth is out and their places supplied with shop teeth; while with a feeling of relief the martyr to dentistry utters a thank the Lord, they are all gone, and goes out to extol the merits of the substitute. Here, too, I appropriately inscribe failure on my banner.

I am told that my failures in filling arise from not preparing my cavities well; that I cut away too much or too little; that I do or do not use retaining points; that I put in too much or too little gold; that I should use soft foil; that I should use cohesive; that I should use amalgam, or some other plastic; that I never should allow myself to use amalgam, &c. Bewildered, I drop my wedge-shaped pluggers and soft foil, I turn to serrated instruments; work them by hand, then by the automatic, followed by the hand-mallet, from two ounces to a pound in weight; then the electric plugger. I give large V shaped separations—on Arthur's style—then I wedge or drill from crown, in hopes of hitting the line of an approximal cavity—may miss it some, but can finally succeed by enlarging enough. What does the loss of so much structure amount to? Nothing, when the tooth is saved; but as I sometimes lose one of these fillings, I often find at second trial that the tooth is gone, sacrificed to the theory of no separations, The result, of course, is due to imperfect work.

I discard amalgam, but to take it up again; change my mode

of work, but to either try something new, or go back to some old and well-tried method, and be content to learn that each and every plan that has yet been devised to save the teeth will be accompanied with numerous failures, if I have any thing to do with them.

I might tell you how I have labored with abscessed teeth and the varying results—sometimes curing the abscess, restoring the teeth to usefulness for a while, but the trouble finally returning; removing necrosed or denuded aveola; excising the denuded portions of fangs; of efforts to adapt artificial dentures to the mouth—and the many marked instances of failure; pivoting by the old method, by Peabody's, Richmond's, Bonwill's, and others, and the failures that follow; riveting or banding split teeth; controlling toothache, neuralgia, correctly diagnozing odontoblasts, and other calcific matter in pulp cavities, pulpitis, periostites, or exostosis pyorrhœa aveolaris, or senile decay,—in fact, in every department of the profession I have, and do make repeated failures, both in judgment and skill, and so confess to you, and express my humiliation at the fact and an earnest desire to avoid them. It is true that sometimes I catch a glimpse of what looks like a failure, coming from those who are eminent and have impressed me with their infallibility. But this very confession will bar my evidence, as I have shown you how liable I am to err; so that you may readily believe that I am unable to distinguish between success and failure.

Now, sirs, while I have made these confessions, I have avoided any allusion to the other side of the subject. I appeal to you all to observe well, and see if we are justified in taking as strong positions as we usually do in defense of our peculiar modes. Will the facts sustain us? If not, let us retrace our steps and take a position that we can maintain, lament our short comings and try to overcome them, be not too confident or boastful lest we come to grief, and ever bear in mind that in each and every plan there is more or less that is good and should be retained for use at the proper time and place. Do not let us limit our resources, but be prepared to draw forth things new and old

and apply them to the credit of the profession and the good of humanity.

On motion of Dr. McAuley, a vote of thanks was rendered for the above paper.

"Sensitive Dentine" was discussed at the night session.

Dr. McWilliams thought well of the use of nitrous oxide gas as an obtunder.

Dr. McAuley uses the gas also with good results.

Dr. Merrell obtains good results from the application of creta. prep.

Dr. Dunlap favors sharp instruments, a steady, firm cut in operating, the edges lubrucated with vaseline, and the use of salt and salt-water on the necks of teeth and gums to prevent the deposit of tartar—these deposits often developing sensitiveness around the teeth.

Dr. Ball, a visitor, gave his views on the pathology of the cases.

Dr. Chisholm recommends antacids.

Dr. W. A. Johnston likes the effect of chloride of zinc.

Drs. Pollard and Johnston both combine bicarbonate of soda with chalk and apply.

Dr. Rambo gave his experience also.

Dr. J. T. J. Watson, of Wilcox county, was elected to active membership.

THIRD DAY.

The meeting was called to order by the President, and proceeded to business.

Dr. Dunlap offered the following resolutions, which were turned over to the Board of Dental Examiners, with an order to report at the next meeting of the Association:

Mr. President and Gentlemen of the Association:

At our last meeting, when the Board of Dental Examiners, as Committee on Legislation, were called on to report, my impression is that they made a verbal report, that it would be inexpedient to attempt further legislation at the ensuing session of the Legislature; and this report was received and adopted.

As a member of the Board at that time, I did not press my views upon you, nor present a minority report; for I had resolved to resign my position on the Board, and in so doing would cease to be a member of the Legislative Committee. But now, as a private member of the Association, untrammelled by office and with no higher aspirations than those of a worker in the ranks, I would call your attention to changes that it would be advisable to have made in the law.

First: Section 3 enacts that a Board of five shall be elected every two years by this body. This leaves it optional with us as to whether any members of the Board of to-day shall be elected for the next term. Should five new members be elected, they, being unfamiliar with the work, rules, &c., will labor at a great disadvantage for at least one year; and about the time the board gets in good working order, it is retired for a new one. To obviate this weakness in the law, I suggest,

1st. That the Legislative Committee be instructed to draft an amendment to section 3, by which one or more members will be retired every year, and an annual election be held to fill the vacancies.

2d. That the committee have section 4 amended by striking out article 3; that the word "*other*" in section 4, article 4, be stricken out.

That the Board, as a Legislative Committee, be authorized to prepare amendments in accordance with the above instructions, and such others as they may think needed, and report at our next regular meeting; when, if approved either in whole or in part, such changes to be placed in the hands of the committee with authority to secure the legislation needed.

W. D. Dunlap.

Dr. Robertson read the following paper on

DENTAL EDUCATION.

Dental Education and Dental Literature are subjects about which so much has been said and written, that we feel like giving it a passing notice only; not that the subject has been exhausted, but that those treating the subject have exhausted themselves on the subject. Most of the papers that have fallen under our notice on this subject have been elaborate and exhaustive—hence, we shall be crisp and dry.

Dental literature has become so boundless we hardly know where to begin or where to end. Since dental colleges, dental associations and dental journals have sprung up all over the land, dental literature has taken on various forms and shapes. We have now collegiate literature, scientific literature, associational literature, journalistic literature, and mite or paragraph literature. As well as having these varied kinds of literature, we have men of various talents to pursue after the different classes of literature. Some have desires to be always reaching out into new fields, where new and fresh truths are blazing forth in bright effulgence, to illuminate and enlighten their understanding. Some depend upon the journals for their knowledge of dental science; others pick up a paragraph here, and a mite there, and put them together to make up the sum of their dental knowledge. Most of our associational literature is instructive and edifying; some, however, is hard to define—especially that part of it that is so easy to stimulate, and when stimulated lets off and belches forth a vast amount of steam. It is a kind of literature that is puffed up and noisy. It is like the pebbles upon the shores of the boundless ocean of truth lying out before us.

We set out to say as little upon this part of the subject as would answer, only desiring to make a few reflections by way of suggestions, and devote the most of our time and remarks to the educational part of the subject.

If there is any subject that interests the profession more than

another, it is dental education. Dental knowledge is boundless; its length, breadth and depth can not be fathomed. We can only contemplate it in all its relations; it is all around us, near by and far off. How much there is that we do not know does not appear. We can only see how little we do know; the more we know, the less we think we know, and the less we know, the more we think we know. Imagine a young man just hopping out from the colleges, with his pin-feathers coming forth, and let him contemplate what is before him. At this period of his professional life he knows about all that there is to be known; but let's hear him when one, two, three, and five, yes twenty years passes away—then he can look back upon his past errors, and wonder at them with exclamations of surprise. He can now feel how much glory there is in being great in little things. Now he has a clear insight to the truth of things, and such powers to walk in the way he sees, that he will deserve the reverence of those more highly favored intellectually. He is now in the position to progress, and cries out from the depths of his soul—yes, the cry comes welling up from the great deep of his soul, for help to go forth in his might and in his strength. There was a time when he knew as much as he wanted to know. He had been to the great seats of learning where knowledge was dispensed bountifully, and the very floodgates of dental education had been turned loose upon him. He had received it orally; he had had it passed from lip to lip; theory and practice had been demonstrated; he had had "line upon line and precept upon precept, here a little and there a little;" all the ways of getting knowledge had been opened up to him; he had discerned her paths and walked in her ways, until now his knowledge was complete. He goes out into the world, mixes and mingles with all classes, but why there are so many that can not see and understand his vast importance becomes a mystery to him; but as time passes and light bursts upon his mystified vision, he begins to feel that if he had a dozen diplomas from as many different colleges, he would be ashamed to face them.

Some of us have passed through these trying ordeals, and

great are the ordeals. This condition of things is partly due to the short time colleges take in preparing young men for the profession. A large proportion of young men turned loose by the colleges upon the country to practice our profession, are not prepared to practice successfully in two terms. The term of pupilage is too short. The colleges to which we are mainly to look for improvements in this line, are those immediately under our patronage. Feeling that our southern institutions should have the entire support of our southern people, our southern associations, and those from the South seeking a dental education, we can take the liberty of making such suggestions as will inure to the benefit of both colleges and pupils. In many respects we have reason to be proud of our colleges; they have struggled up, under trying and adverse circumstances, to a high degree of respectability. Yet improvements in such directions that will put a stop to the twaddle of a medical education being so essential to the practice of our specialty, will be a triumph over those who contend that without a medical eduction a man is not fit to practice the dental art.

While we would not discourage the importance of a medical knowledge in the treatment of the diseases of the oral cavity, we do contend that it is not necessary to look to medical schools for this knowledge, when we have men of ability in our own schools capable of giving all the instructions necessary to the treatment of any and all the diseases coming under the province of the dentist. Teachers of the dental sciences are far better qualified to train men beginning the practice of dentistry, than teachers of the medical science. Medical schools are not the schools for us to look to for dental training; neither are they the schools for beginners in the pursuit of dental knowledge. A medical education will no more fit and qualify a man for the practice of dentistry, than a dental education will fit and qualify a man to practice medicine. We go further, and say that every man who expects to practice dentistry that begins his education in the medical schools, has got the wrong bull by the horns. A man must have that mechanical and manipulative training that is so necessary to the practice of dentistry, which medical

schools know nothing about. This training can be had no where so well as in our separate dental schools. If we attempt to educate the rising generation of dentists in mixed schools, we will have neither dentists nor physicians; but the country will soon be flooded with half-breeds—one in both, and both in one. The thought of two in one has projected the idea of a medical recognition. A medical recognition will not raise us higher in the scale of professionals. We are already as much of a profession as the medical profession is a profession. We can not make ourselves more honorable by attaching ourselves to the medical profession, and the more we persist in knocking at the door of the medical profession, the larger and more multiplied will our shame become. We predict that if this morbid desire for medical recognition increases, with its unwise and unjust pretensions to widen and extend the dental profession, the time is short when the spirit of progress that has taken such strong hold upon our profession will wane, and the star of our destiny will go shooting from the mid-heavens through the trackless void of a stupendous and overwhelming defeat and failure. Let us be satisfied with our fate, and quit knocking at the door of the medical profession for medical recognition, at a time when we least need it. We have weathered it through perils and difficulties for these many years, and certainly can paddle our own canoe for the remainder of our years to come.

As we promised to be crisp and dry, we will submit these hastily thrown together thoughts for your consideration, and leave the subject with you.

The following preamble and resolutions were acted upon and adopted:

PREAMBLE.

To increase the efficiency, and advance the interests of the Association, to more fully enlist the hearty co-operation of the Profession, and the sympathies of the public, I make the following suggestions, and embody them in the following resolutions:

Resolved, 1st, That the President be authorized to select and appoint a member to deliver an opening address, to be delivered on the evening of the first day of our Session, at eight o'clock; that two other persons be

selected (members or otherwise), to deliver popular lectures on Dentistry, one on the second night and the other on the third night; that the public be cordially invited to attend.

Resolved, 2d, That the Association be authorized to have our Transactions published substantially in pamphlet form annually; each Dentist in the State, and each Dental Association to be entitled to at least one copy.

Resolved, 3d, That the Dues be increased from the present rate to Two Dollars; the increase, one dollar, to be set apart as a Prize and Publishing Fund.

Resolved, 4th, That the Committee on Publication be authorized to draw on the general fund (should the special fund be insufficient), through the proper channel.

Dr. Chisholm, Chairman of the State Dental Examining Board, made a full report of the work of the Board; which was received with a vote of thanks.

REPORT.

MONTGOMERY, ALA., April 14th, 1883.

Gentlemen of the Alabama Dental Association:

Though not required by the laws regulating the practice of dentistry in the State of Alabama, yet your Board has made it incumbent upon the Chairman to render to the Alabama Dental Association, at its annual meetings, a report in writing of the work of the Board during each preceding year, together with such recommendations as the Board thinks advisable for the further success of the work before it, looking to the good of the profession.

As the work of the Board is for the protection of the ranks of dentistry, and being nurtured under the protecting care of the Alabama Dental Association, whose aid and co operation it earnestly craves, the Board deemed it but just and right that a summary report be offered to your deliberative body, setting forth the work that has been done during the term of office of your present Board.

The first work of the Board was to issue notices of its first annual sitting to every dentist in the State, to take place in Selma on July 19th, 1881, calling attention to the recent act of

the Legislature for the protection of dentistry. At this meeting, too, forms of applications were adopted and issued. Immediately on organization of the Board at this meeting, we examined the written applications for license, and being found satisfactory, we issued 137 on ground of five years practice, medical certificates, and diplomas. Five applicants for examination came before the Board, and *none* stood a sufficient examination to pass the Board. Forms for temporary and permanent license were adopted and ordered to be printed, and the Secretary instructed to have a seal engraved, and issue the licenses as soon as they were ready; which was done.

At the meeting in Montgomery in the year 1882, the Board was called together the day before the meeting of the Association, for the purpose of adopting a Code of Rules and Regulations to govern the actions of the members of the Board, predicated upon the recent laws and in as strict accordence therewith as could be arranged. In this the members found much difficulty, as this law admitted of some varied constructions wherein differences of opinion for a time proved a barrier to further work. But ultimately, in formal session, the Board agreed to a harmonious course of work. This course involved a period of some months consideration, through correspondence, ante-dating your last annual meeting, and a form of work was finally agreed on, adopted, and ordered to be printed.

During this session thirty-three licenses were granted. Seven applicants were examined, and only one passed, the Board having unanimously adopted what it believed to be the sense of your body, that its members should prosecute the examinations of applicants as thoroughly and rigidly as would be required before receiving a diploma at a reputable dental college. These examinations, both oral and written, lasted through a period of two days.

The Board, through its entire existence, has examined fourteen applicants, and only two of this number have stood a satisfactory examination.

During the present meeting twenty licenses have been issued. Complimentary in part to the laws of your state, and the work

of the Board, we are happy to say that eleven of this number were issued upon ground of diploma bearing dates of 1882 and 1883. Tabulated more comprehensively, we give the following report:

Permanent licenses issued to	190
Temporary licenses issued to	8
Students' permits issued to	6
Without license	59
Total number practicing in the State	263
Non-resident practitioners, with license	7
" " without license	17
Total non-resident dentists	24
For violations, there have been indictments	8
Of this number, non-residents	5

The further work of the Board was to issue two editions of a Directory to every dentist in the State. To keep a revised list of the dentists itinerating in and out of the State, together with those beginning to and quitting practice, deaths, &c., has been a work of no small sum; and in justice to the worthy Secretary, it has been done without cost to the Board, by admitting advertisements on the fly-leaves. Over five hundred of these have been sent out to dentists at a cost of over $10.00 for postage alone.

As to the work marked out to your future Board, the retiring Board would most respectfully recommend the co-operation and assistance of this Association, both individually and collectively; assistance in correcting directory rolls, reporting violations, &c., not only now, but through the entire year.

As members of the Board of Examiners retiring from the positions of honor you have conferred, we most respectfully tender our thanks; also, for the aid, encouragement and sympathy we have received from you. While we have failed to do our duty perhaps in many ways, yet we have used the best efforts within our power to serve you and the profession at large.

Most respectfully submitted, we have the honor to be your retiring Board.

E. S. CHISHOLM, Ch'n,
W. R. McWILLIAMS,
T. M. ALLEN,
J. C. WILKERSON,
J. G. McAULEY.

Dr. McAuley explained the difficulties the Board had labored under.

Dr. Morgan paid a high compliment to the efficient work of the Board, and spoke of the good influence it was exerting abroad.

The Association proceeded to the election of officers to serve for the ensuing year:

E. S. CHISHOLM, Tuscaloosa, President.
R. U. DuBOIS, Greensboro, 1st Vice-President.
W. R. McWILLIAMS, Athens, 2d Vice-President.
EFF. WAGNER, Montgomery, Secretary.
G. M. ROUSSEAU, Montgomery, Treasurer.

EXECUTIVE COMMITTEE.

Dr. E. S. Chisholm, *ex officio.*
Eff. Wagner, "
W. D. Dunlap,
A. Ewbank,
S. Rambo.

STATE DENTAL EXAMINING BOARD, TO SERVE TWO YEARS.

Dr. W. R. McWilliams, Athens, 1st District, Ch'n.
A. Ewbank, Birmingham, 2d District.
J. C. Johnston, Marion, 3d District, Sec'y.
W. B. Stewart, Clayton, 4th District.
J. G. McAuley, Mobile, 5th District.

Birmingham was selected as the next place of meeting.

The Association then adjourned to meet in Birmingham on the second Tuesday in April, 1884.

ALABAMA DENTISTS TO THE FRONT!

It takes work to accomplish great and good results, and without flattery we may safely say that we need be proud of the achievments already won for the dental profession in Alabama. For, within the brief time of three years, we have re-organized the Alabama Dental Association into good working order, with a creditable membership of the best working bone and sinew material in the State; have memorialized the Legislature, who has heeded our appeal and granted us even to the extent of our asking, good and wholesome laws to protect us. Under the work of the Board of Dental Examiners, the entire profession of the State, amounting in number to some three hundred members, have yielded allegiance to the powers that be; and more, turned to offer us aid.

It is not only the State of Alabama that is proud of our achievements, but we are quoted by every State in the Union, and the eyes of the entire profession are upon us.

Having put our shoulder to the wheel, can we cease now from pressing on, even to greater and better things? To this end we address you through this means, hoping there will not be one in our fair State, however modest and diffident, who will not readily respond to a call for WORK! Let us then work together as a united brotherhood, knowing that what we individually contribute to the advancement of dental science will be meted back to us in ten-fold abundance.

Apart from my official duty as your President, and feeling assured the step will meet with your hearty approval if promotive of the above ends, it is requested of every dentist in the State to lend or contribute, for exhibition at our next annual meeting of the Alabama Dental Association, whatever he may have of Anomalous Specimens, Handiwork, Instruments, Appliances, Special Descriptive Modes (in writing), Modern or Ancient Literary Productions. In short, a sort of *Dental Museum* is desired, whereby may be collected and fostered under the protection of the Alabama Dental Association whatever will

tend to its interest. The preservation of Historic Relics will mark our progress, become invaluable in time, and always prove of interest; otherwise they will be lost. Besides, this will presently generate discussion that will beget new channels of thought.

This work can easily be accomplished by carrying with you such specimens to the meeting, or sending to the care of George Ewbank, D. D. S., Birmingham, who will be assigned this duty. He will receive and receipt for them, label, classify, and place on exhibition, with the name of the contributor attached. This is a useful field of labor, gentlemen; can we count on your valuable support?

That the more timid and younger of our Association may have a means of asking any question, however simple or complicated, upon any subject in dentistry, a *Question Box* will be arranged. Into this written questions can be privately dropped, and a special hour will be set apart by the Association for their consideration and discussion.

Inviting your co-operation, gentlemen, in every effort promotive of the cause of dentistry in the State of Alabama, I am

Very respectfully,

E. S. CHISHOLM,

President Ala. Dental Association.

(2) G. S. Barnes -

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TRANSACTIONS

OF THE

ALABAMA DENTAL ASSOCIATION

FOR THE SESSIONS

HELD IN

BIRMINGHAM, ALA., APRIL 8th, 9th, 10th, and 11th, 1884.

MONTGOMERY, ALA, APRIL 14th, 15th, and 16th, 1885.

MONTGOMERY, ALA., APRIL 13th, 14th, 15th & 16th, 1886.

MONTGOMERY, ALA.:
W. D. BROWN & CO., BOOK AND JOB PRINTERS AND BINDERS.
1886.

OFFICERS FOR 1886-7.

President—R. U. DuBois.....Greensboro.
First Vice-President—T. P. Whitby .....Wetumpka.
Second Vice-President—W. W. Evans.....Union Springs.
Secretary—T. M. Allen (re-elected).....Eufaula.
Treasurer—G. M. Rousseau (re-elected.....Montgomery.

EXECUTIVE COMMITTEE.

R. U. DuBois, *ex officio*.....Greensboro.
T. M. Allen, *ex officio*.....Eufaula.
E. S. Chisholm .....Tuskaloosa.
G. M. Rousseau.....Montgomery.
George Eubank.....Birmingham.

BOARD OF EXAMINERS.

William R. McWilliams.....Athens.
E. S. Chisholm .....Tuskaloosa.
W. B. Stewart (and of State).....Clayton.
J. C. Wilkerson.....Selma.
G. M. Rousseau .....Montgomery.

OFFICERS FOR 1884.

E. S. Chisholm, Tuskaloosa.....President.
R. U. DuBois, Greensboro.....1st Vice-President.
William R. McWilliams, Athens.....2d Vice-President.
E. Wagner, Montgomery.....Secretary.
G. M. Rousseau, Montgomery.....Treasurer.

EXECUTIVE COMMITTEE.

President and Secretary *ex officio* officers.

W. D. Dunlap.....Selma.
A. Eubank.....Birmingham.
S. Rambo .....Montgomery.

PROCEEDINGS.

The fifteenth annual meeting of the Alabama Dental Association, held in Birmingham, Ala., April 8th to 11th, 1884.

The regular annual meeting of the Alabama Dental Association was called to order at 10 o'clock A. M., the President, Dr. E. S. Chisholm, D. D. S., presiding, in Phœnix Hall, Birmingham, Ala., Tuesday, April 8th, but adjourned until 2:30 P. M. on account of the small numbers present.

At 2:30 p. m. the meeting was called to order by the President, and opened with prayer by Prof. W. H. Morgan, of Nashville, Tenn.

Roll called and absentees noted.

The President then delivered his annual address, as follows:

PRESIDENT'S ADDRESS.

Gentlemen of the Alabama Dental Association:

With unfeigned regret on *my* part, and profound sympathy for *you* I appear in the role of speaker; for I am more occustomed to filling teeth than ears. Nor would I wish to inflict as much pain on *you* as upon my *patients* in so doing. Though I none the less appreciate the force of the constitution governing this body, which makes it incumbent upon the President to deliver an address before the expiration of his term of office. After one year's service in that capacity (less three days,) I deem sufficiently approximative to be a compliance with this established usage, an opportunity is thus afforded to offer some suggestions as to system which should characterize the present session, as well as general facts connected with associational effort,

which I deem more appropriate before than after this meeting.

But before entering upon this duty, gentlemen, allow me to congratulate you upon this happy annual re-union with the propitious surroundings so favorable to a pleasant and instructive meeting. It is indeed sweet, after another year's toil to meet with so many familiar faces among the brotherhood, exchange congratulations and discuss in a brotherly way the events of another year. Before me alike, I see the youthful and the aged—some with even boyish mien, whose countenances are bright with anticipations of future greatness and honorable distinction, and are the coming lights of the profession. Others of you wear furrows of fatigue upon your brows, perceptably deeper than one year ago, whose heads have again been touched by the frosts of time, and are one year riper in professional attainments and nearer the great eternity. Here we are all convened, gentlemen, in the capacity of one common brotherhood to consider the great question—*the relief of suffering humanity.* Is it not worthy of remark, too, that the destroying angel, Death, has not visited our ranks during our associational existence?* May we bow with reverence and thankful hearts before the great creator for His preserving mercy, and permitting us this pleasant re-assembling under auspices so favorable.

But again we are assembled for a purpose; not to discuss some captivating theory, or entertaining history, or wonderful phenomenal reality. But we are here as seekers after truth, and we should be zealous of the object sought. Some of us advance but slow because temptation beset our way and drives us into profitless wanderings. Others are more inclined to retrospection and instead of advancing, look back as did Lot's Wife of old, and christalize into old fogyism. Others again are given to idle theorizing and speculation on things impractical. But we need more work, less talk.

* J. W. Lock, of Troy, and W. A. Johnston, of Uniontown, have since died. Peace to their ashes.

Work is my theme. Life is too short and breath too precious to waste on idle words. We should prove our faith by our works. Jehovah fixed the doom of man when he pronounced the sentence upon Adam, "In the sweat of thy face shalt thou eat bread till thou return unto the ground." So life by appointment divine is made up of work. All nature heeds the injunction.

From the first germ of our physical being to the development of the mighty man of strength, is nature unceasingly and symmetrically at work, utilizing the elements to the organization of our bodies which are by the Word of God said to be "fearfully and wonderfully made."

Unceasing labor is no less true of the inorganic world. The soils and minerals take on new forms and properties from the atmosphere and the destruction of vegetable matter, which may again be imparted to other vegetation till its purpose is subserved, then again return back to the inorganic state, and so on *ad finitum.*

The atmosphere around us too is at work purifying itself by its motion and commotion, where in the chilling blasts from the northern iceburg commingles with the scorching summer breeze from the South.

Establishing an equalibrium of temperature; besides receiving its health-giving constituents from the vegetable kingdom to be consumed by the animal creation and *visa versa.*

We know not, gentlemen, that one immolecule exists in this great universe that is not undergoing a change.

Why, the heavenly worlds above cease not in the *duty* of dispensing light and heat on their eternal course through the regions of infinite space.

Everything is work, *work*, all subserving the will of the great first cause who worked for six days, creating the world and all things which therein are.

So then we see that nature has set the example of motion, activity, industry—God has enjoined it upon his creatures—the demand is upon us from every side. We are given

physical endowment with a mental capacity enthroned. It is ours to bring order out of chaos—science out of empiracism. Pope has wisely said:—

> "All nature is but art unknown to thee.
> All chance direction thou canst not see
> All discord, harmory not understood,
> All partial evil, universal good."

Allegorically speaking, the Alabama Dental Association is a pondorous machine but is constructed to do a great and glorious work if properly wielded—an elephant on our hands, if allowed to work in the wrong way.

If the machinery fail to run smoothly at first because of its being new, we must not be discouraged; as each functional part must adapt itself to the bearings, and wear off the asperities before we can expect to reap the greatest good. The application of a little oil of forbearance (at the short comings of others as we would have them do with us at the present) will prevent frictional jars, cog-lashings, always common with new machinery. I think I make no mistake in saying we now run smoother than at first. And may it be ours always to keep sufficiently lubricated to prevent friction.

Of course every other wheel both great and small will move when the driving wheel starts, all being properly *banded* together. It is only disconnected machinery such as wheel barrows which *move only* as they are *pushed.*

Nor need we any lack of *power* to run if we only draw the *throttle-valve* and turn on the *steam.* We need no apprehension, either from a medium or brisk *speed,* as our *foundation* is broad and strong enough. The *work* is clearly defined in our constitutional fonndation to be the promotion and fostering of Dentistry in all its branches, also to build up the professional character of its members, and to encourage intercourse and good will.

So then the promotion of dentistry in all its branches implies unanimity of action as an organized society wherein committees are selected in the varied departments, that each

and every branch may receive a due amount of investigation. Each committee should be an organization within itself and its chairman direct the work by assigning each member on the committee *his* part of duty, or subject to be investigated.

Before our annual meeting, the report of each member should be handed to the chairman who will report the whole in a condensed form to our Association. It will then be discussed in deliberative session, then referred to the Committee on Publication, for final appearance before the profession.

Though gentlemen, it takes some capital to do our work. Our Publication Committee, to my certain knowledge, has been cramped for want of funds. Our clinic facilities could be more ample. Why should the defraying of the expense of an expert or two attend; in given specialties, would only be an economical and judicious expenditure of means when we consider the benefits accruing therefrom to this body. So let us not have an empty treasury, which is always a mark of a weak society, but keep always a small amount on hand for contingencies. Yes, we should lay by in store a sufficiency each year to spread a banquet, and not *only* enjoy "a feast of *reason*" but a "flow of the soul" as well. Do not understand me to mean a feast for *eating* and a flow of the *bowl.* But I do think a broad plank in the road to success and the perpetuity of our body depends upon the adoption of some recreative measures. We need not the anæsthetic and prosthetic but *must* enjoy some of the *æsthetic*' as well. It will encourage a larger attendance and give a zest to work.

Though our Association is not all it should be in many respects, yet we have reasons to feel proud of the achievements already won, and for which it is our happiness to congratulate you.

Among the important work done, as a result, may be mentioned prominently, with the establishing of a better professional ethics, that of securing wholesome and protective laws, and the creating of a State Examining Board. The

good of this work can but partially be realized as yet; although now quite apparent. It has served to cement the profession of the State into one concerted, and harmonious body, establishing a better social feeling; it has pressed many young men to the pursuit of knowledge, whose attainments would never have gone much beyond an empirical course of practice. Others, too, have been driven to a full collegiate course, and are now the peers of the best men in our State. But I will digress so far as to say that the examining board should be made up of your best representative men, who "unawed by fear, unbribed by gain," will carry out to the letter the requirements of the law; and keep quite apace with the spirit of the age.

The shape and features of the profession of the future, in my humble opinion, greatly depends upon the examining boards you are to select. Because, to them, the standard of practice and status of education will be committed, and the *curriculi* of your colleges will be controlled to a large extent by them. Some of them have already been going behind the college diplomas, and are urging these institutions to a stricter conformity to their avowed collegiate requirements in dealing out diplomas. But that which we should most desire, is the co-operation of the State Boards with the colleges; the former fixing the standard—the latter, executing the work.

But to resume. Private and individual effort is the feeder to our dental engine. The organized machiney will not run without pabulum. For instance, there is not one in this assembly however modest, that is not master over all the rest of us in some particular—who has not some new idea as to mode, instrument, or appliance, or is not in possession of some case of interest that would prove of value to the whole of this body. Too many of us attend dental meetings, to be entertained rather than being ready with some digested idea or matured experince with which to entertain others.

So, our place of work for this association, *is at home.*

Every day in the year (except Sunday), and when assigned a work on a committee, let investigation and experiment tend in that direction:

"Do not then stand idly waiting
For some greater work to do,
Fortune is a lazy goddess
She will never come to you.
Go and work in any vineyard
Do not fear to do or dare,
If you want a field of labor
You can find it anywhere."

In conclusion, gentlemen, allow me to thank you for the honor you have conferred upon me in making me your president. It is the more appreciated since I know it was not conferred on account of capability as a chairman or leader, but I flatter myself it was due to your belief in me as a sincere worker for the highest ends of your association. In the past, I have endeavored to comply strictly with our constitutional requirements so far as was known to me, and will so continue till my successor is elected.

Apart from my duty as constitutionally demanded, I have asked your co-operation in a work of which but little good could be felt at this meeting, as it is not understood; but the magnitude of which will, sooner or later, be realized. I speak of the collection and preservation of specimens, anomalies, etc. I feel assured, you will censure me not when you but know that it was zeal for Alabama to be in front that prompted the step.

It may not be known that rooms will be granted the Dental profession in the Smithsonean Institution building, at Washington, for the establishment of a National Dental Museum and Library, whenever the project seems feasible. This offer was made the National Dental Association before its last biennial meeting, held in the Smithsonian, during the summer of 1882. At this meeting, the President was instructed to appoint a committee looking to the practicability of the work, and your humble speaker was appointed on that committee, and a report required to be made at the

next meeting this year. Looking to this end; and *more — that Alabama shall be foremost in the work*, we have assumed this much, feeling assured that steps will be taken at this meeting looking to the organization of a State Museum and Library, if no more, until the profession be more united towards organizing a strictly National Dental Association, when still greater ends may be accomplished.

The great object of this work is the collection of specimens and relicts, pertaining to dentistry, both ancient and modern, in whatever will develop *data* in ethnological statistics, also specimens literary and historic; anything that marks the professional career from its first spontaneous germ of existance to the present gigantic proportions. Otherwise much of the history of our profession will be lost to the future, but that matter is left with you for consideration.

I invite your co-operation through the deliberations of this meeting, and thank you for your attention.

The following committee on membership was appointed: Drs. R. U. DuBois, W. G. Allen, and J. C. Johnston.

The following names for membership were reported on favorably by the committee, and were elected members of this Association:

F. G. McElhaney, Auburn, Alabama,
J. F. Turney, Hartsell, Alabama,
W. M. Horton, Birmingham, Alabama,
S. W. Tally, Birmingham, Alabama.

Annual dues were collected, and the Secretary made his annual report which was received.

The Treasurer made his report, which was found correct and received.

A resolution of sympathy was adopted for Drs. J. G. McAuley and W. R. McWilliams: That we regret to hear of their illness.

Drs. J. C. Johnston, F. G. McElhaney and M. J. Lumquest were appointed to draft suitable resolutions on the death of Dr. J. W. Locke.

On motion the following hours for meeting were adopted: 9, a. m. to 1, p. m., 3, p. m. to 6, p. m.

W. D. Dunlap, Chairman of Publication Committee made the following report which was received and adopted and ordered spread upon the minutes:

Report of Publication Committee on Transaction of Association published for year 1886.

No. of Copies of Transactions printed	325
No. of Copies Distributed	285
" " " On hand	40
Cost of printing same	$80 00
" " Stamps and Wrappers	6 50
Total	$86 50
Received from Dental Dealers in payment for advertisements inserted in Transactions	$85 00
From Treasurer out of funds of Association	1 50
Total	$86 50

As you will see we get them printed, postage, &c., at a cost of only $1.50 to the Association.

We took the liberty to insert advertisements of Dental dealers to help pay expenses of printing, &c., as there was no funds set apart for that purpose.

Respectfully submitted,

W. D. Dunlap,
G. M. Rousseau,
Com. on Pub.

Committee discharged.

On motion of Dr. Rousseau the Medical Profession and Press of the City and visiting Dentists were invited to seats in the meeting.

Meeting adjourned until 9 A. M. to-morrow.

PHOENIX HALL, April 9th.

MORNING SESSION.

Meeting called to order by 1st Vice-President, R. M. DuBois, presiding at 9:30 A. M. Roll called and absentees noted. Regular order of business taken, and reports of standing committees called for and with much regret only a few responded as ready to report.

Committee on Voluntary Essays, and Dr. W. D Dunlap, of Selma, read the following paper on

DENTAL CONSERVATISM:

In this age with rapid strides, all branches of Science, are yielding their fruits to the energetic labors of a people, awake to the fact, that we have as yet, had, but a glimpse of the hidden treasures that lie within its adamantine walls. We are encouraged to labor, and delve—and in new fields reap the reward of days of toil, and nights of study.

In the early history of the Jewish race, the husbandman was not allowed to glean his fields of grain, but commanded to leave the gleanings for the destitute. So too, no matter how rich the harvest that science yields to day, some poor investigator will to-morrow go over the field, and from the gleanings gain a Ruth's subsistence.

In the early history of California, the gold hunter with pick and pan, located his camp beside some stream, and daily washed the sands, for the grains of glittering gold. After a time, Placers were well nigh exhausted, and then, the quartz rock was made to give up its gold, stamp mills were soon found almost everywhere. The miners began to dig, following veins, often losing, but ever digging. Soon the supply begins to run short, and bids fair to give out, when a new discovery is made, a new, more economical, and more perfect way has been discovered. The tailings or refuse of the stamp mills, are worked over, and the yield is richer than ever.

So too with coal, petroleum, &c. The waste products of

yesterday, are utilized to-day, and yield a most glorious harvest. This is found to be true in all departments of science, and it gives encouragement to all who labor earnestly, and constantly in this direction.

We are told that the old miner who washed the sands with his pan, or cradle, looked with contempt and disgust, at the new fangled machinery, that pounded the hard rock into powder, that he croaked, and predicted ruin to all who engaged therein. Yet to-day these men are the only ones found, among the ruins of many of the deserted mining settlements. The more enterprising having all gone to fresher fields, and are toiling to become rich.

So too in our profession, we have many stranded wrecks. Starting life, with but little capital in the way of education, and caring less, they have shouldered their pan and *footed* it to the diggings, staked their claim, and gone to work, and when their small claim has been worked out, they sit down and grumble, ever ready to pour into a listening ear, a dreary tale of their troubles. Is it any wonder that they are left to entertain each other, by the smouldering camp fires of the dead past; while the very place they call home, is shunned by the busy world ?

Turning from this picture, let us take a look at another. Here is a man who starts for the fields, equipped with a smattering of almost everything, talking glibly of his scientific knowledge, loaded with all modern appliances handsomely decorated, he too reaches the land of Opher, but perhaps, is averse to labor, so his fertile brain is put to work to devise a way to make a fortune without work, and becomes a Col. Mulberry Sellers. Or perhaps in some way he stumbles on some abandoned claim,—finds a small nugget, and from thence forth he is the greatest of the great. His wonderful discoveries must be known, and every one must listen. The papers are made to herald the glad tidings, and all are invited to bow down and worship this golden calf. Ever, and anon one such succeeds in getting the worship he craves, and the renumeration he seeks,—he is a

transmuter of medals, converting brass into gold—but while one such may succeed, one hundred fail. Such are found flitting here, and there, the laughing stock of all sensible persons, living by duping their fellow men, and detested by their comrades.

Another starts out equipped with a well balanced mind, and a fixed determination to work and learn. Possibly his outfit is meagre, and his implements clumsy, but the man is terribly in earnest. His eyes are wide open, and being careful to make haste slowly, he takes, and works, Placer, rock or tailings, all being grist to his mill.

I take this character as a true representative of Conservatism, and would here combat the idea that a conservative is either slow or an old fogy, but one who catches with avidity, at all that is really good. In fact, conservatism may be likened to a "Grain Separator," that is busy at work separating the grain from the chaff, and dirt, it is an element that gives stability to all sciences, and is ever necessary to the success of that branch, to which we belong.

Observe closely, the character of those, who have done most to elevate our profession. They have been no idlers, perhaps, have labored through many difficulties, are not men of genius,—but have ever cultivated their powers of observation, systemising and classifying all new facts. Their minds have become large reservoirs out of which, they draw knowledge, as from wells of Truth. Such men are the bright and shining lights, around which silly moths flitter and fawn, trying to live in a light that is not their own. All honor to the conservative Dentist. For he is ever ready to furnish to his patrons, things both new and old. Never behind the age, grumbling at fate nor running wild with a hobby, that has but a grain of truth to sustain it.

All nature is laid under tribute to furnish material to pursue his calling, "and many shall rise up, and call him blessed."

To-day the demands of conservatism upon us are stronger than ever for our profession, and its literature seems to be

following, if not leading, in efforts to present the world with something new.

It would be needless, and a thankless undertaking to mention the new devices, modes, and styles, that have been held out as the one thing needful, from time to time, for the last quarter of a century, or their rapid death, suffice it to say, that the air is full of rumors of new, and strange things. There is more than one Richmond in the field, claiming all the honors of new discoveries, and more than one Chase, or Flagg, admonished by declining powers, that there are better things than gold for saving Teeth. . And so, taking counsel with their infirmities, they become the authors, and advocates of the New Departure, so well adapted to their changed physical conditions, and by so doing are working an irreparable injury to our noble calling. The lazy, ignorant, unprincipled, both old and young, being ready and apt pupils, while now and then, some good man is deluded into adopting their views, by the past record of the authors, the more readily as frequent failures follow the most approved plans. And while the demand exists for something new, even as in Athens of old, may there ever be found brave hearts, willing, and ready to battle for truth, and ready to reveal the unknown God, as the God of science, and so dispel the errors, that almost inevitably accompany the introduction of new things.

On motion the paper was received and discussed by Drs. W. H. Morgan, C. A. Merrill, W. R. McWilliams, J. C. Johnston, T. M. Allen, W. D. Dunlap, and others.

Dr. Morgan repudiated the idea that gold ever was the cause of the destruction of teeth when properly inserted. That the mere fact of gold present in the teeth never yet produced decay.

Dr. W. R. McWilliams related a case in practice where he used Os-Artificial, and saved teeth, when he believed it would have been impossible to have saved them with gold.

Dr. J. C. Johnston thought that teeth that could be saved at all could be saved with gold.

Dr. J. F. Turney claims that it is the method of using the gold that does the mischief. He stated a case in practice, and asked if amalgum would not have been better.

Dr. T. M. Allen, answered no; that amalgum was the worst thing that could be used in that case.

Dr. T. M. Allen then read the following paper on

OPERATIVE DENTISTRY.

Operative Dentistry includes the application of remedial agents for the prevention and cure of disease, and the removal and correction of malformation and abnormal growths, so that the physiological agencies may reproduce and maintain the elements of the tissues and organs. It should be and is the duty of the dentist to impress upon the mind of parents, the necessity of having their children's teeth looked after by a competent dentist throughout the entire period of first and second dentitition, so that they may be able to correct or at least modify the irregularities and malformation of the teeth and perform such operations as will prevent or arrest decay.

The decidious or temporary teeth should be retained in the mouth until displaced by the permanent teeth. It is very often necessary to remove disintegrated tissues and fill decayed temporary teeth that they may be preserved in a live and healthy condition, until they are displaced by the eruption of the permanent teeth.

When devitalization of the nerves of decidious teeth occur, and especially when abscessed they should be removed to prevent irregularities and malformation of the permanent teeth, as the tissues of the roots of dead teeth are not absorbed by the permanent teeth.

The first permanent molars, and, in fact, all the teeth should receive careful attention from their first appearance, and should be carefully examined, and on the first appearance of disintegration or irregularities, remedial agents

should at once be applied and if this is done promptly and judiciously nine-tenths of those teeth that are lost will be saved in a sound and healthy condition through life, and irregularities will be unknown.

When disintegration has commenced on the proximate surfaces slight wedging should be resorted to, and all the disintegrated portion removed with narrow strips of fine emory cloth, or sand paper, and polished with pulverized pomice applied on strips of cloth, or fine rubber disks, but if the decay has penetrated the dentine, then it is necessary to cut away all of the disintegrated tissue, and carefully prepare and fill the cavity properly with whatever material your judgment may suggest as being the best for the case in hand.

It is far better to use tin, gutta-percha, or some one of the numerous cements, or amalgam, than to improperly insert gold, or to use gold and cut away the tooth to conform to the shape of the filling, thereby leaving wide V shaped separations.

Permanent separations ought not to be made; they are unsightly, interfere with mastication, annoy the patient, and in a great many instances accelerate rather than prevent decay upon or above the surface that has been cut away. No one should undertake the preservation of the teeth until they are thoroughly competent to perform all operations that may be necessary to preserve them in their natural shape and usefulness.

Operators should have a higher appreciation of the true and the beautiful, than to be satisfied with simply being capable of using amalgam, or some other plastic material, or inserting gold and then cutting away the enamel to conform to the shape of these fillings, or make wide V shaped separations, and thereby destroy the contour, beauty and usefulness of these priceless organs.

In preparing cavities in Bicaspid and Molars care should be taken to see if disintegration has advanced along the fissues or cusps, and if so, remove every particle of disin-

tegration by following up the line of demarcation with a fissue Bur in the Dental engine, and thecavity so prepared that there will be but very little undercuts, and the edges of enamel evenly and smoothly finished, and when filled, the gold should be dressed down even and smooth with the enamel, and no over hanging edges left to be roughed up or to collect particles of food and furnish a starting point for recurrent decay.

I will not attempt to describe the proper method of preparing gold and filling cavities, as a great many of you already know my methods There are various methods of impacting gold into cavities, such as the automatic, hand engine, and electro magnetic mallets and hand pressure. Of the methods of using and the advantages to be derived from the use of the different mallets, I will leave for some one more competent to tell you of them. While I use all of the forms of mallets mentioned, and like them all, I still use hand pressure a great deal, and give it preference over all others in a great many cases.

The method of using hand pressure and the kind of instrument to use is almost entirely ignored by writers on operative dentistry. A great many claiming that teeth with frail walls cannot be filled successfully with hand pressure. I say they can, and are, when proper instruments are used, and used carefully. To fill a tooth with cohesive gold, with hand pressure, requires no more force than with the mallets. It is not the amount of force exerted that properly condenses a filling, but the manner of application. Cohesive gold does not require a pressure of twenty-five or thirty pounds with a broad or wedged shaped instrument to force into the uneaven places and undercuts, and to consolidate the filling, as with soft foil, but, on the other hand, small serrated points, such as the Varney, or Webb Electro Magnetic mallet points, should be used, and slight pressure applied in the right direction, and where needed, is the proper method. I can fill any cavity with hand pressure and cohesive gold, with as frail wall as can be filled by the mallet, and do it as quick and as thorough.

Don't understand me to condemn the Electro, or any other mallet, for I do not, I like them and use them, and prefer them in a great many cases to anything else. It is the abuse and not the use of cohesive gold and hand pressure that causes so many to condemn it.

Our schools and colleges are in a great measure to blame for the deficiency in the use of hand pressure in filling teeth, it is almost, if not quite, entirely ignored in the clinics and lectures, and soft foil seems almost to have become a thing of the pass, so far as its use by young practitioners are concerned. It is easier to put in a contour filling with cohesive gold than it is to fill a simple proximal cavity with soft foil.

Discussed by Drs. Dunlap, Morgan, Chisholm, Prof. J. Taft, (of Cincinnati,) and others.

On motion of Dr. Dunlap, the rules were suspended and an invitation was received from the Superintendent of Pratt Coal and Coke Co. R. R. to take the members of the Association on an excursion to Pratt Mines on to-morrow.

Dr. Dunlap moved that the invitation be accepted, provided that they would start at or about 8 A. M., and return them at 10 A. M. Carried.

Dr. Morgan concurred in Dr. T. M. Allen's views in removing dead decidious teeth, and gave a case in practice where great injury had been done by these teeth being allowed to remain in the mouth, and that he would, without hesitation, extract an abscessed deciduous tooth at once.

Dr. Morgan was requested to continue his discussion as far as he desired, as all were very much interested in his remarks. He continued by discussing the filling of pulpless teeth by saying that it was the worse time to fill the canal immediately after devitalizing the nerve on account of the protoplasm; he opened the canal largely and used carbolic acid, &c. He also stated that a tooth in a person after puberty was easier to manage on account of the scarcity of protoplasm, hence he opened very large the canal in pulp-

less teeth to get rid of this protoplasm coming from the dental tubuli.

Dr. J. F. Turney in discussing this subject moved to sustain Dr. Morgan's views.

Dr. Chisholm objected to establishing any such precedents as adopting the views of any one man.

Subject passed.

Dr. George Eubank read the following paper on

DENTAL EDUCATION.

Mr. President and Members of the.
Alabama Dental Association :

The paper which I wish to bring before you this morning is concerning Dental Education. Nowadays the fathers who send their sons to college, and the young men who are striving to educate themselves, all look sharply at one great end, the saving of time in arriving at practical results. What is to be done must be done quickly. The hand must be taught practical work, the tongue actual speech, and no superfluous time or energy taken to acquire the great principles which underlie the one and the other, and on which alone a solid superstructure can possibly be built. In the haste to be rich, each seeks to join the busy throng of workers, and there is no time for aught that cannot be seen to bear at once, and directly, upon this great object. The ancient maxim, "hasten slowly," is forgotten, and the superficial character of most of our knowledge is the consequence—a general level of shallow dullness. Catering to this greedy haste of the public, our institutions of learning modify their courses of study, and culpably yield where they should strenuously resist. And yet the hobby of the age, riding above international quarrels and local politics, is education, the diffusion of knowledge; and we Americans pride ourselves upon our superior institutions of learning, our enhanced facilities for acquiring it, schools are multiplied. The jealousies of cities and the silly rivalries of

neighborhoods give rise to a myriad birth of institutions with high sounding titles, which tempt the unweary student to his loss, while wealth untold, which, combined in one vast fund, would accomplish more than the most sanguine could devise, is wasted in detached and aimless efforts. The object of our schools should be to diffuse knowledge, but in such a way as to impress upon each student the depth of his ignorance, to instil into his heart an earnest longing for knowledge, and to cause him, by the labors of life, to seek steadily and earnestly to obtain it.

The pride of a little learning is dangerous, as it prevents the search for more; and the graduate who builds his faith upon a diploma which he can hardly read, sealed with a seal of whose origin or significance he knows knothing, is little better than a camp follower of the army of scholars, or a deserter from the cause for which he enlisted, and whose bounty he has received. That graduates cease to study as soon as they have shaken off the embrace of their Alma Mater is notorious, and the fact proves the general remissness and incapacity of their teachers; in that their aim has been for a day and not for all time, to make scholars not students. It has always been easy, too easy indeed, even in the best of our colleges and schools, for the dunce and the sluggard to pass over the course unscathed, and receive their diplomas at the end. In some the course of study is so short, the studies so easy or so few, and the examinations of so little account, that the merest smattering is requisite to enable the student to pass with honor, as it is called.

Some have even descended so low as to sell their diplomas (on the sly) for money, not demanding so much as the form of an attendance, or an examination.

This is the worst form which it is possible for this disease to take; but all our educational institutions, from the highest to the lowest, are more or less infected with it. It is a matter of pride and rivalry with them, as well as revenue, which shall have the greater number of undergraduates, and which at the annual period, shall send out into the

world the greatest number of Alumni; therefore too great strictness in the requisition for admission and graduation are impolitic and unprofitable. How many retire from our colleges with the corrected parchment can turn about and enter again?

To how many of those graduated from our professional schools would we be willing to trust our lives or property, until they have received a new diploma from the school of experience? The poor we have always with us, and we are very willing that "'prentice hands" shall be tried upon them before we place full confidence in professional skill. It may be answered that it is not the object of these schools to make perfect practitioners at the outset, but to guide to proper methods of study and practice, and to start the neophyte on the right track.

But how many do even this properly? Are they careful enough whom they send out with their recommendation signed and sealed? Are they too regardful of their reputations and revenues to discriminate over closely? It is not well to have it said that half or other large proportions of a class were not allowed to be graduated, because, in what they had pretended to study they were not sufficiently up to pass the examinations; therefore that the Professors have not done their duty, and therefore the institution is not what it pretends to be, but no better than an incorporated swindle. Theories of education are beautiful on paper. Plans are excellent till tried; and men of the best motives will often fail from want of courage to face and fight down difficulties. We pray "lead us not into temptation," and then walk deliberately into it, trusting to Providence or to luck to enable us to overcome it. The spirit of rivalry is the mocking fiend that deludes, more perhaps than any other, not only our college faculties, but the communities on which they depend. This divides interest, scatters wealth, fritters away revenues, and prevents a good, strong, healthy public spirit from attaching itself to any one institution. As in city or town it is impossible to have a school house

next door to every home and it is necessary to centralize that the average accommodation may be equal. So it is with our colleges.

It is not wise policy for the profession, for the community, nor for the colleges, that there should be one at every practitioner's door. They should be so centralized as to concentrate upon themselves the full strengh and interest of the profession, and should have for their object not the aggrandizement of this or that man or set of men, nor the fostering of the pride of any one section or locality, but the best good of students who commit themselves to their material care, and of the profession upon which they depend. The good of the students again, should be sought, not in making things easy, and launching them half-taught to deceive and prey upon an unsuspecting public, but in so regulating the studies that the worthy and industrious can get the education he seeks, while the lazy and shirk must work or go without a diploma. The number of ignorant and worthless graduates from all of our institutions of learning is notorious; and the fact of having been graduated from one is daily becoming of less account, even in the eyes of the credulous and long suffering people, who have either suffered themselves to be beguiled by the name, and have been but too willing to accept as a lion any one who will wear the skin.

It is disgraceful that it should be so, but so it is, and so it will continue to be, until our colleges regard themselves, or are compelled by the community to act as something more than conductors by which the common fountain, the public purse, may be tapped, and as vehicles for the dissemination, not of knowledge, but of degrees among mankind.

It becomes us therefore, each and all who have the good of our profession at heart, to lay aside religiously all envy and uncharitableness, all petty jealousies and heart-burnings, individually and collectively, and throw our united influence to bear upon the elevation and improvement of our Dental Colleges who hold the fate of our profession in their hands.

Let us insist upon it that "they be an example unto themselves;" that the spirit which inspires them, and emanates from them, be a lofty spirit, breathing life.

Make them feel that even from a money point of view, an elevated standard, and a high-toned policy are the true ones; that cheap diplomas, short courses, and nominal examinations will not be tolerated, make them extend their course of study, and at the same time make them more thorough, that they may be graduate students, earnest and faithful seekers, inspired by the zeal of their teachers to emulate them. In this regard, it is worthy of consideration whether some preliminary examination for admission should not be had. The man who has left the work shop of the mechanic, the day laborer who can hardly write his own name correctly, and has had no intellectual training whatever, notwithstanding five years more or less of practice, is hardly in a condition to receive the lofty metaphysical research, to sound the depths of chemistry, or to tread the maze of anatomy. What can he comprehend of the technical nicety of their nomenclature who cannot pronounce the names, or by what principle of association can he store away his new gleanings with his former intellectual gatherings? How much of real knowledge does his diploma represent? How much of what he has acquired during his college course? Was he even taught how to study?

Is he not rather disgusted with his useless efforts, and rejoiced when he is at last released? The giving such a man a degree is not only an imposition upon the public, as a certificate of superior knowledge, but an absolute injustice to his fellows, as putting him upon a par. So far as it is the power of the faculty to do, with his hard working and intelligent companion. It seems then that some other preparation is necessary than mere time spent, and labor spent in an office. No man is worthy the graduation of any college, whose ethics is the virtues of his ignorance; who cannot write a line without misspelling the commonest words, and whose ordinary conversation breaks every bone

of the Queen's English. A degree given to such a man, is simply a declaration of the unworthiness and mercenary character of the faculty by whom it is given, and places another clog in the way of general advancement of our profession.

The objection to granting of degrees upon examination merely, without requiring attendance upon lectures, is similar. His diploma is but an advertisement, framed and hung up as a bait for patients, and his D. D. S. is flaunted on all occasions, proper, and improper, for a like purpose. Let the past be past, and all who have come into our feast from high-ways and by-ways and hedges, continue unrestrained in the full enjoyment thereof, each conscientiously striving to do his duty to those who place themselves and their families under his professional care; but let not the errors of the past be repeated in the future. Let the wise and the ignorant, the learned and the unlettered, with one mind and accord, frown down all attempts to enter by any other way than by the wicket-gate at the beginning of the road. Make all to pass the slough of Despond, climb the hill Difficulty, and be caught by the giant Despair, before they enter our Delectable Land.

Let not the time server and the charlatan be hereafter recognized. Let us hold out our hands to our weaker brethren, and strive to lift them up; and do our duty to those already with us, but see to it that no more come in. The Dentist of to-day are all, or nearly all, members of some Dental Society, and as such have it in their power, if they will but work together, to control the future of our profession, by refusing to receive students who will not agree to a full course of study. Too many of our young men go into the profession thinking they will have but little to do to make a comfortable living and have an enjoyable time through life. The public is much to blame by using so little discretion and common sense in their search for professional science.

How often have we heard it said by strange patients who

had suffered by another's malpractice, that they thought "One dentist as good as another," forgetting that though men are "born equal" they do not long remain so.

It becomes us then, in educating ourselves, and elevating our own standard, to strive to do the same for the public, whom we propose to serve. When we show that we respect ourselves, they will begin to respect us. And here it is that the proper influence of our colleges will be greatly felt. When it is insisted that students shall be graduated at a Dental or Medical College before commencing to practice; when the older members of the profession, who have not enjoyed this privilege, show themselves worthy of it by earnestly working to raise their own attainments to the same standard which they require of their students; and when the Faculties of our colleges take such care in the selection of their graduates, that none shall be permitted to receive a diploma who is not likely to reflect honor upon his Alma Mater,—then public attention will be attracted, intelligent inquiry will be made, and our light will begin to shine. As things have been can we blame the physician for not liking that his time honored title of Doctor, should be adopted and desecrated by the ignorant charlatan fresh from the work shop or the plow; or from giving the cold shoulder to the whole body of dentist who make no distinction between the skillful and the clown? When we look around us, we cannot but observe how comparatively few there are who have received anything like a professional education, and how many who have stolen into our fold with the merest pretense at study, or any other proper preparation for its difficult and delicate duties. Some of these are men of talent, who arrive almost by instinct at correct results; others, merely men of assurance who have obtained their skill at the expense of their patients, and whom even practice cannot make perfect. This being so, we must feel and acknowledge the necessity that lies upon us, to labor with earnest and united effort to lift our profession to its proper position. Gentlemen, the past is irretrievable, but the future is in our

hands, and it is our own fault if we do not make such use of it that, at least, the youngest among us may live to find himself a member of an acknowledged learned profession.

Discussed by Drs. Morgan, Dunlap, Chisholm, T. M. Allen, Merrill, W. G. Allen, and others.

Dr. Dunlap thought that if the Associations would make the demands on the colleges that the standard would be raised. He thought the law should be so as to require an examination before granting a license, independent of applicant holding a diploma. Drs. Chisholm and Merrill agreed with Dr. Dunlap.

Dr. Morgan spoke of the influence of the Alabama Board in advancing the standard of Dentistry. That he thought the Alabama Dental Board had done more in the last few years to advance the standard of Dentistry in the South, than almost all else combined.

Adjourned to meet at 3 P. M.

SECOND DAY—AFTERNOON SESSION.

Meeting called to order at 3 P. M. by the President. There being such a small attendance, the members coming in slowly, we entered into an informal discussion, about instruments, appliances, &c. Dr. Morgan spoke of the use of spirits of ammonia on sensitive surfaces, also as a counter irritant in periostitis.

Dr. George Eubank then read the following paper :

"SOME OF THE OPPORTUNITIES, RESPONSIBILITIES AND ENCOURAGEMENTS OF LIFE."

Mr. President and Gentlemen of the
Alabama Dental Association:

The paper which I wish to bring before you this evening is a subject a little aside from such as have usually been brought before our meetings; but I am sure that you will admit that it is not entirely inappropriate.

In a simple way my theme concerns ourselves and our profession and some aspects on our existence here. The fact that we are dentists should not be permitted to overshadow the fact that we are men. In the earnestness of the pursuit of our calling we are in danger of forgetting that our secular occupation, broadly considered is not an end, but in a high and worthy sense a means. It is an adventitious circumstance corresponding to what the grammarian calls "the accident of inflection."

The great root of existence, with all its possibilities and responsibilities, goes deeper, and is of more importance. Through its intelligent considerations we may come to have truer and better views of our daily life, just as the applications to particulars is easy after the generalizations are learned. Pope has truly said, "The proper study of mankind is man." In a certain sense it is the only study, for relations, connections and dependencies are such as to include all things. The study of man broadly undertaken, is as wide as the universe, higher than the heavens, more profound than the depths, as unending as eternity. As all the material commerce of the world has for its object the gratification of man's communications and experiences, have their part and influence in moulding us, in developing us, in determining what shall we be here and hereafter. What a piece of work is man! how noble in reason, how infinite in faculties, in form and moving, how express and admissible;

in action how like an angel! in apprehension how like a god! the beauty of the world, the paragon of animals! Physically, man is a machine not unlike a locomotive, or any other complex mechanism for the conversion of matter and force. Certain supplies being provided and certain conditions observed, certain processes are performed and certain results obtained.

It is easy to say and to see that this machinery should be wisely cared for, cleansed, lubricated and intelligently guided. But the human body is more than a machine. It is for the time not only the means of impression and expression of the mind and spirit, but it is their abiding place, and should be made and kept a fit temple for their indwelling. But it is in connection with man's higher faculties, their culture and development, that a wisely considered and comprehensive plan is most essential. Let us think for a few moments of the opportunities which we have. The world demands men—

> "The Sage who lit a candle in the day,
> And wisely peering, said, "I seek a man,"
> Was not so crazy after all, for they
> Are seen as rarely now as they were then.
> There's any quantity of gentleman;
> You know them by their oath and their cigar,
> And cranium emtiness; not one in ten,
> Is sensible as Plato's bipeds were."

The search of Diogenes had been continued from that day to this. It goes on perpetually. "Instead of the supply of men being greater than the demand for every capable, faithful, energetic man, willing to work, who will devote himself earnestly to the interest of his employer, there are a hundred situations open. Business men are always on the lookout for trustworthy assistants."

The world everywhere and all the time wants men to do its work of every kind. If students, if young men desiring advancement, only appreciated a little of how their capacity is being gauged and their conduct watched by those who

have vacant places to fill, it would seem that they would be more circumspect. They should remember also the other fact, that the mere seeking of a position is not the essential part of being worthy of it.

Not all the advice to his Son, of Lord Chesterfield, as contained in his letters, are above criticism; but prominent among the good things which he did urge upon him was that thorough preparation for the business of life that should make him necessary to the world. So necessary that instead of his having to seek the world for what it could do for him, the world would seek him for what he must do for it.

We are all too apt to be looking indefinitely forward for some great work to do; when our spirit and capacity would be far better demonstrated by doing excellently each day the ordinary, simple tasks that fall to our lot.

Goethe, wisely says, " man is not born to solve the problem of the universe, but to find out what he had to do, and to restrain himself within the limits of his comprehension.

We of to-day are greatly favored in the times in which we live, the multiplication of books and of educational institutions, general and special, the marvelous advancement of science, the progress of investigation, the revelation of truth of every kind, with all the help and conveniences, now indispensible, which these have given our daily life, suggest a few of our many privileges. Think that a hundred years ago there were no railroads, no steam navigation, no telegraph, no telephone, no anaesthetics, no friction matches even,—a hundred years ago, even we dentists had hardly begun to exist. More than one small boy has had intervals of wishing that himself had lived in the last century. But in all this marvelous progress of the recent past, only the beginning has yet been made in the wonders of discovery and invention that the unresting spirit of those who quit themselves like men will bring out for the convenience and blessing of the world in the future. In this there is unlimited opportunity for accomplishment. Hardly an appliance

is yet made as perfectly as it might be. Men saw apples fall to the earth many times before they learned the great lesson that Newton read therein. They saw many flashes of lightning before Franklin lead it quietly down his kite string and demonstrated that even it respects a silken cord, and may be harnessed to do man's bidding.

Plato's description of man as a biped without feathers, and even with flat nails, comprehends but a small portion of the characteristics distinguishing him from the rest of the animal kingdom. We sometime hear low and mean actions of men spoken of as beastly. Such expressions are a vile slander on the beast.

They are given certain natures which they have no power to change. A lion must be a lion, a sheep a sheep, a musquito a musquito. Indeed, a man might do well to imitate the good qualities of many of the lower orders,—the high spirit, ambition, ready service of the horse, the patient and steady plodding of the ox, the faithfulness to trust and abiding friendship of the dog, the far sightedness and perseverance of the hawk, the industry and provision for the future of the ant, the light heartedness and cheeriness of singing birds, the steady persistance to an end, though its attainment be many times thwarted and the same work done over and over again, of the spider. Animals, too, are content to work each in his appointed sphere.

They are not victims of the alcohol habit, the opium habit, of—shall I say the tobacco habit—and they are not often guilty of abusing any of these natural powers.

But man is given a different degree of intelligence, knowledge of good and of evil, capacity to restrain his lower nature and to cultivate and make better his higher life.

The opportunities of this life are not all material. There is the opportunity for building ourselves, for character building, for moulding and developing all that better part of us which is not material, which cannot die, and whose future existence must be so largely effected by the way in which

this opportunity is improved. There is the opportunity for helping others in imnumerable ways, for lessening pain, for relieving trouble, for soothing sorrow, for giving cheer, for pointing out encouragement, for conferring happiness and here may we produce results greater and more enduring than anything that the material world can show; and the agencies are so simple, the expenditures in proportion to results so trifling. A smile, a kind word, a flower, an expression of appreciation, of approval, of praise, of friendship. How inspiring is a little deserved commendation for a child! and—"Men are but children of a larger growth. Our appetites are apt to change as theirs, and full as craving, too, and full as vain."

Multitudes of instances have occurred in which so little a thing as a word of praise has changed entirely the course of a life, and made all the difference between dispair and courage, between dependence and self-support, between listlesness and energy, between vice and virtue, between failure and success, between misery and happiness. Influence may be exerted to depress and hinder as well as to encourage and sustain.

Put yourself in the place of an actress making a debut in a strange city, before audiences in the highest degree, exacting, and see if you are not overwhelmed by the avalanches of adverse criticism, as to be incapable of doing justice to the degree of capacity you actually possess,—unless, indeed, you have the strength to rise up as did Misraeli when ridiculed and scorned in his weak, early attempt to make a speech in the House of Commons, and say, "The time will come when you shall hear me," and make the promise good. This matter of influence is an immense one, and we cannot discuss it now. We were speaking of opportunities, and in connection with this helpfulness, will only stop to say that there are constantly, daily and hourly, arising occasions where small investments in these little things may realize incalculable dividends for ourselves, for those around us, and for the world. What else shall we say

of opportunities except that in them we are given all for which self-reliant human nature can reasonably ask? In the little things of our daily life we have a better than Archimedean chance to move the world, not grossly, but by brightening the little spot of earth on which our lot may be cast, and sweetening the little atmosphere about us. A friend, a busy and earnest Physician of Howard College, enthusiastically said to me on a certain occasion, "If we would only improve our time and our capacities to their utmost, we might be gods instead of men." But there are limitations even to opportunity. Perhaps the chiefest of these comes from time, which passes so rapidly that we are old before realizing it. But yesterday we were boys, wondering what the great world had in store for us; to-day, its work, its cares, its responsibilities are upon us; to-morrow we go hence to be remembered no more. It seems marvelous how any one who has arrived at years of discretion can find time hanging heavily on his hands. To have to resort to expedients "to kill time" is pitiable; it seems almost as sacrilegious as to destroy life. If thou dost love life then improve thy time, for that is the stuff of which life is made.

The Spaniards have a proverb which says "Fortunes knocks once at every man's door." Happy is he who has his latch-string hanging on the outside, and who attends the call when it comes.

Again, as the length of our work is inexorably determined by time, its health is also brought within narrow compass by the limitations of human capacity. It has been well said that three principle circumstances combined to make up the character of man,—his birth, his environment, his own efforts.

The first is entirely beyond his own control. If the Declaration of American Independence were to be construed as affirming that "all men are created equal," in any other than a political sense, we would say at once that the declaration was guilty of telling a—mistake.

Many are heavily handicapped in the race of life by this

first circumstance. Happy for them if it be only physical weakness or deformity, and no vicious tendencies, or criminal proclivities.

The accident of environment, though not quite so absolute as that of birth, can usually be hardly at all modified by the individual during the most impressionable years. Later, a man may in a measure choose his own surroundings; but, in a general way, we may say that man has little control over the first two circumstances of his make up, and that the third circumstance, his own efforts, which he is supposed to entirely direct, cannot escape the modifying influences of the other two. Perhaps this is not the strictest logic; but it will serve our purpose. With so much to effect ones determination to do well, it follows that the determination should be as strong as possible. But with natural gifts, contributing influences, and voluntary efforts, at their best, man can compass but little. Truly the most profound student, while knowing a little of many things, can hope to know thoroughly well only one thing, and may deem themselves blest if they succeed in accomplishing so much as that. To particularize a little, it is every man's duty, first, to at least not to be a burden upon the world. The tramp's proposition that the world owes him a living without effort on his part, is the very converse of truth. No man has the right to partake of the fruits of other's labors, or to be supported from the general fund without making his due contribution for the benefit of the world.

The work of the world need not press unduly upon any if it were equally distributed.

The man who habitually and with malice aforethought, avoids the liquidation of his pecuniary obligations, and especially while keeping up a luxurious style of living upon the earnings of other people, is a fit candidate for the whipping post; and for such I am an earnest advocate for its revival.

These people are not constituted so as to suffer any punishment from public opinion or from any moral influ-

ences which their creditors are able to bring to bear against them. Their "inward monitor" is indeed an iron-clad. For them seclusion for a time in well warmed rooms, with good board at the States expenses, is too comfortable, and hanging does not last long enough.

The man whose whole soul is in his work may be cold, or wet, or sleepless, and not know it. The miseries are shut out by the pre-occupation. It is not in the nature of man to be idle without suffering ill consequences. The mill that has nothing to grind, grinds itself. Pleasure flies persistently from pursuit; but she comes to abide with the man who, instead of wooing her directly, gives his attention to the discharge of his duty. One that has had no experience can have no conception of the pleasure of accomplishment, and particularity of accomplishment under difficulties. One who has never been weary can have no appreciation of the comfort of well-earned rest; and the discipline and development growing out of these experiences are among the most valuable of every-day life.

If we would only realize the fact, that we have more reason for happiness in our daily work, with all its cares, and anxieties and perplexities, and weariness, than would be possible for us to have under any circumstances that we could contrive for ourselves, we should see little occasion or pretext for down heartedness.

> "Heaven is not reached at a single bound,
> But we build the ladder by which we rise
> From the lowly earth to the vaulted skies,
> And we mount to the summit, round by round."

We have great encouragement to begin tasks in the fact that beginning is usually the most difficult part. It has been well said that every hour, well or ill spent, makes it easier or harder for us to spend the next hour well. Every time we yield to tempatation makes it easier for us to yield again. "We first endure, then pity, then embrace," says Emmerson. A great part of courage is the courage of hav-

ing done the thing before; and in all human action those faculties will be strong which are used. The old proverb has it "Choose that course of life which is the most excelent, and habit will render it the most delightful," One who is beginning to make a success is all the time getting farther and farther out on the long end of the lever. Accompanying the feeling of success should be one of caution. "Let him who thinketh he standeth take heed lest he fall." In the grandest success there is an element of danger growing out of that very success.

Everything having been successful one comes to think that everything must be successful. And the cares, discretion, and vigilance are neglected. Failures under such circumstances are not mortifying. None cannot remain stationary.

We must all be making progress or falling behind. When one feels that he has conquered all his little world there is reason to fear that his little world has begun the conquest of him. We often have the opportunity to learn more from our failures than from our success.

Every failure should be a rock upon which to securely base a success. A sensible analysis of ourselves with the proper discretion would lessen the failures to a wonderful extent.

Stanhope says: "I am convinced that a light supper, a a good nights sleep and a fine morning would have sometime made a hero of the same man who, by an indigestion, a restless night and a rainy morning would have proved a coward," There are two certain classes of things that we should not worry over: First, those which we cannot help; and second, those that we can help,—each for obvious reasons. All that the past has in it of evil should be put under the feet; all that the future has in it of blessing should be enjoyed; for the future, cheerish hope and work with courage.

Evil is like a nightmare; the instant you begin to strive with it to better yourself, it is already ended."

It would be well if we could all appreciate our blessings as did a poor old woman at an alms-house when relating to a visitor her sufferings, loss of friends, property, home, health, everything that we are accustomed to look upon as making life desirable. "Yes, she said," "I have indeed suffered much; but bless the Lord, I have got two teeth left, one in each jaw, and they meet each other."

We are surrounded by a world of beauty and blessings if we only open our eyes to see and our hearts to receive.

"And this our life. * * *

Finds tongues in trees, books in the running brooks, sermons in storms, and good in everything."

The dentist is blessed in that his work is so directly with the people, and so largely with the better class of people in the community. He has an opportunity to contemplate many of the pleasanter and nobler aspects of humanity, and by them he should be himself cultivated and refined.

Our burnishers, used constantly upon gold, come to reflect something of the nobler metal. We ought not to be less alive than cold steel to improve influences. Happy the man who continues his better nature that as he goes through life and gains added experiences, he grows more gentle, more appreciative, more considerate, more charitable, more tender; who does his work in his time, and when his turn comes to resign, resigns gracefully; who is content with the fact, that however large a place he may have filled in the world's affairs, the vacancy left will be of the same size that is shown by withdrawing a needle from water, and that even if he is a King, the proclamation will be, "The King is dead; long live the King."

Webster said truly "One may live as conqueror, a king or a magistrate; but one must die as a man."

Dr. Dunlap introduced Prof. J. Taft of Cincinnati, Ohio. Drs. B. H. Catching, R. A. Holliday, and W. G. Brown of Atlanta, Georgia, having arrived were present.

J. G. Chisholm, student, read a very interesting paper on

MECHANICAL DENTISTRY.

[This paper is not among archives, and I have not been able to get it from the author.—T. M. A., Sect'y.]

Drs. Dunlap and Morgan made some very complimentary remarks about Dr. Chisholm's paper.

Dr. Dunlap gave his experience with lower plates and described his method of making them with flanges, as described in the Cosmos of a year or two ago. They had proven very satisfactory.

Dr. Merrill asked for information in regard to trimming models when there were hard parts. Dr. Turner gave his method of taking impressions using borax almost entirely.

Dr. J. C. Johnston preferred plaster.

Dr. William R. McWilliams stated that he generally preserved the gums of his casts. He also asked for methods of taking the bite and articulating the teeth.

Drs. Dunlap, Merrill, Ball, W. G. Allen and others gave their methods, Dr. W. G. Allen gave his method of making gold plates.

Dr. H. A. McDaniel being called on gave his experience in gold plate work, and gave his method of taking impressions and articulating teeth. The discussion was continued by Drs. Morgan, Thos. Smith, McAnnally, Ball W. G. Allen and others.

Dr. W. G. Brown, of Atlanta, Georgia gave his method of making plates and illustrated his method of taking the bite.

Prof. Taft was called on and gave us a very interesting talk on Prosthetic Dentistry.

Dr. Dunlap described methods that he thought would help us a great deal.

Adjourned.

THIRD DAY.

April 10th.

The members of the Association went on the excursion to Pratt Mines at 8 A. M., and returned at 10:30 A. M.

Clinics were held at Dr. Eubank's office, from 11 A. M. until 3:30 P M.

Prof. J. Taft, of Cincinnati Ohio, Prof. W. H. Morgan, of Nashville, Tennessee, and T. M. Allen, of Eufaula, Alabama, gave some very interesting clinics. Dr. T. M. Allen gave a very interesting clinic with the Electro Magnetic Mallet.

Clinics were very much engaged in by all.

Meeting called to order by President Chisholm, at 4:30 P. M. All present.

The application of Dr. B. B. Seal, of Coatopa was presented for active membership and he was elected.

The following able address of Dr. J. C. Johnston was delivered by him. Subject:

ORIGIN, PROGRESS AND PRESENT STATUS OF DENTISTRY.

Mr. President and Members of the
Alabama Dental Association:

I am before you to-night, at the request of our worthy President, to deliver a lecture upon some topic pertaining to *Dentistry* that will perchance be of interest—or rather stimulate public interest in the vast importance that our specialty pertains to the general good.

It is not expected that the great majority of medical men, or the members of any of the kindred branches of medicine should lay any claims to oratorical display or deal in flowers of rhetoric; their vocation does not require it, hence very few ever attain any degree of eminence in that direction. I belong, most emphatically, to that great majority.

I propose, in the first place, to briefly notice the history of our profession, its origin, progress, and present status,

for I have been made—in my brief experience—painfully aware of public ignorance in this regard. In this short *resume* of the early history of our profession, permit me to say that I am indebted to the writings of Chapin A. Harris for the major part of the information gleamed—and, so far as memory serves me, will give his own language.

My *main* purpose, however, is to notice the pathological conditions of the oral cavity and the therapeutical agents employed for the prevention, alleviation of cure of those conditions. Dentistry has made rapid strides in scientific research during the last quarter of a century. We of the profession to-day, occupy a vantage ground far superior to the pioneers of the past—thanks to their unselfish, arduous labors. Dentistry is not, as many suppose, of recent origin, a branch as it were, of the parent trunk, medicine. So remote is it, says Harris, that it cannot be traced with any degree of accuracy. We learn from Herodotus, the Grecian historian, when he sought to be inducted into the mysteries and sciences, in the world's primeval centre of learning and civilization on the banks of the Nile, that he found surgery and medicine divided into distinct professions. He says there were surgical physicians for the eye, for the ear, for teeth, and so on for the different classes of disease. How far their researches were successful in the diagnosis of pathological conditions and the therapeutical agents employed for the relief of those conditions, can never be determined. The destruction of the great Alexandrian library, we are told, created a chasm in the annals of ancient art and science that can never be replaced. Hippocrates, one of the great, if not the greatest medical exponent of his day, flourished something over three hundred years before the Christian era. He says, for a long time previous to his day, teeth were fastened with a gold wire, having reference, no doubt, to artificial dentures. He also recommends several dentrifices for cleaning the teeth. It is thought—by some at least—who have given this subject their attention, that Galen was probably one of the *best* of ancient writers on the

teeth. He lived and wrote in the second century after Christ—from his time until the 16th century, few traces of the art are to be found, even among the records of medicine. Harris tells us in his collection of the early history of our profession, "That the art of dentistry was cultivated by Greece and Rome during their most palmy days of splendor and prosperity, chiefly in the aid of the charms of beauty. Hence, so far as the paucity of medical works, which have been handed down from the nations, enables us to determine the art, was principally confined to the replacement, by artificial substitutes, of those natural organs that had been lost from disease or other causes. Dentistry, in fact, does not seem to have made much progress for many centuries, for when vandalism shut down upon the world, and learning itself was hidden in the gloom of the dark ages, then every torch light of science, feebly glimmering over the waste of ignorance and superstition, and every star that shone in the moral and scientific horizon were quenched in that chill night of ages, which threw its deadly penumbra over the world. During this pause in the vitality of learning, dentistry fared no worse than other sciences. Demonology and the curative art were antagonistic, and the babalistic mummery of gloomy and monastic ascetics was called in to eradicate pain and disease by the aid of charms and incantations." This dreadful pall, says the same writer, "was not removed until the incubus of ignorance began to be lifted, the revival of letters, and Ambrose Pare wrote *his* celebrated work on surgery. It is said his works were crude, intermixed with absurdities and improbabilities. Yet they proclaimed the dawn of awakening science that had remained fettered during the long night of superstition and ignorance. They were but the harbingers of what is being fulfilled at the present day." Time and the main subject of this lecture, precludes my entering into any lengthy detail of the rise and progress of dental surgery. Suffice it to say, that the profession, in the evening tide of this century occupy a higher plane of scientific advantage than was ever the good

fortune for others to enjoy, and I doubt not is rousing herself for her final and noblest triumphs. Our colleges are increasing, and vie with each other in the noble work. If I mistake not, there are some twenty or more in our own land that are swelling the number of scientific practitioners every year. *Supply* creates demand in some cases, as for instance, in the furbelows of fashion. It is hard for the ladies, however economical they may chance to feel, to pass one of our temples of fashions, and see displayed on opening and reception days, the dainty "*love of a bonnet*," without gratifying their desire, to be the happy possessor of one. But not so with professional characters—*demand* creates supply. Nothing devoid of merit or spurious is ever counterfeited, hence we as well as others, have suffered from designing men. There are still in existence organizations that propose, for a small consideration, to grant diplomas to all applicants who desire to enter the arena of professional life without any preparation, and with *shame do I confess* it, there are men—calling themselves gentlemen, too—who seize upon the tempting offer, thinking thereby to be the happy possessors of plethoric purses, that will supply their every need. I am pleased to note, however, a change in this respect. The guardians of public interest are ferreting out such parties, and we hope, ere long, that sufficient safeguards will be thrown around public interest that will effectually protect it from charlatanism, and relieve the profession of the odium that excrescences produce. Our scientific literature, from a mere sprout has grown to be a collossal tree, laden with the fruit of thought and scientific lore that the ardent student of our specialty may pluck, and be made subservient to the general good. With these few introducry remarks, I now pass on to the consideration of the main topic of the lecture. Following up, somewhat, the line of thought indicated, by my friend, the doctor, on last evening, I propose to notice some of the pathological conditions of the oval cavity, and the therapeutical indications for their restoration.

Therapeutics, says Mr. Webster, is a word of Greek origin, and means I wait on the sick; I alleviate or assuage—in other words, that branch of medical science which has for its object the management of disease. It is the providence of the physiologist to investigate the functions of man in a normal or healthy condition, and the pathologist, to study them in a diseased condition, and the therapeutist to restore them, if possible, to a healthy or normal condition. The day is not distant when every dentist that would attain any degree of eminence as a therapeutist, whether from humanitarian or selfish motives, will have to acquaint himself *thoroughly* with *every* branch of medicine. He should not only have ample scope for the study of diseased conditions, but should also avail himself of the recorded observations of others, for the utmost powers of discrimination are necessary for the treatment of the different classes of disease brought within the purview of the dental surgeon. This knowledge is also requisite to the maintenance of the dignity of our profession. Our conventions and associations are for these purposes. We come together—not as many suppose—to have a *good time*, socially. That is well enough so far as it goes, for we are social beings, and should contribute our quota to the happiness of each other, but there is a *higher* a *nobler* aim in these yearly gatherings. As contact and friction evolve heat, so does the discussion of the various diseases of the oral cavity, with their resultant evils, fire each member, whose heart is in his life work, to be equal to the emergency.

That man is to be pitied who deems himself so erudite as to be equal to all the emergencies of life alone. Wrapped in the mantle of his own egotism, he fails to receive that impetus which possibly might be given him, by contact and interchange of ideas, with his fellow man, that would help him, perchance, to scale many an Alpine difficulty, and plant his feet more firmly upon the round of Fame's ladder, and with better prospects of reaching its pinnacle.

The mouth is the great portal of the system, through

which passes the fuel that is to feed the flame of life, and by the organs of which, it is prepared for the all important work. A few thoughts, showing the intimate relation existing between the mouth, its organs, and the general system, will give to the discerning mind, some idea of the urgent necessity of preserving, as near as possible, a healthy condition of all its parts, that the teeth may perform, untrammeled by disease or decay, the functions designed for them by an allwise Providence Digestion, as most, if not all of you are aware, commences in the mouth, and the teeth are the prime factors in the work. Their office is to reduce the food we take for the maintenance of our physical being, to a pulpy state, the glands furnishing the requisite amount of saliva for its easy passage to the great reservoir of the system, thereby fitting it for the after stages of digestion. Let us examine the subject a little more closely; for what do we eat? Is it simply to gratify the appetite, appease hunger, or prolong existence, without any well defined object of good to be accomplished by such existence? Are we to let the talents, both of heart and mind, given us by an allwise Creator, for our own pleasure and comfort, to be forever buried by such indulgencies? It is a fact, too well established, to require any lengthy dissertation to prove it, that, whenever taste, appetite, or inclination pervets judgment, in quality or quantity of food partaken by us, the brain becomes inert, the whole system torpid, utterly rendering us unfit to meet the exigencies of life successfully. Alas for short-sighted humanity, "dum vivamus vivamus" is the motto of too many, forgetting that they must, ere long, pay the penalty in broken-down constitutions, racked with pain, which becomes an easy prey to disease, and fill—I liked to have said it, a suicide's untimely grave. There are other and serious objections to unlimited indulgence in this direction. By it man becomes a *gormandizer; gormandizer*—why the very word is *abhorrent*, almost a stench in the nostrils of cultivated people, and just in proportion as he or she permits such a state of things to ensue, do they lose the

refining and elevating influences of mental culture, and descend the scale until they reach almost the plane of the lower order of creation. Yes, they live to eat, Anaconda like, they gorge themselves until all the finer sensibilities of their better natures are blunted, they become stagnant, *drones* in the busy hive of humanity, pestilent excrescences upon the family tree, and not unfrequently the butt of social criticism.

The blood, as I had occasion to say in a former paper, read before this Association some two years ago—is the pabulum of life, and the teeth are, in a large measure, responsible for its condition, for they may be said to be the prime factors in its production. If from disease, decay or loss of these organs, the primary stages of digestion are impaired, the surrounding tissues become involved in the ruin, and add their diseased exudation to the already half masticated food, and are carried in this condition to the great furnace of the system to be converted into what? healthy pabulum? Nay, but the rather impregnating the vital fluid with a virulent poison, which sooner or later renders life almost intolerable, and not unfrequently is it the case that disease is so firmly fixed upon the subject of such negligence that death alone furnishes quietus to the mental as well as the bodily suffering of the individual. The ill effects of these imperfect primary stages of digestion are not only seen in the poisoned condition of the life current, but also in the weakened condition of the digestive organs. They, having an undue proportion of the work to perform, soon fail to respond to the demands made upon them, and the heart, that great engine of the system, failing to be sustained with a full supply of full blood, becomes weakened, and consequently unable to force, with its wonted energy, this current throughout the ramifications of the arterial system. So intimate are the relations existing between the different parts of the body, that constitutes the whole, that any disturbance or functional derangement of any of these parts, however remote or insignificant they

may seem to be, has a direct influence, greater or less, upon the whole organism. Our life is but the aggregate of little things. If a straw, says Dryden, can be made the instrument of happiness, he is a wise man who does not despise it, how much wiser that person who heeds the first tocsin of alarm sounded in the functional derangement of any part or parts of the system? Our whole being is, as it were, ramified with a net-work of telegraphic wires, ready to communicate to the brain any and every approach of the enemy, it matters not how insiduous that approach may be. They—the nerves, stand as it were, sentinels, guarding the citadel of life, and those who heed their warnings, and grapple with the enemy ere he fastens on some vital part, are wise.

Dyspepsia, like many other diseases to which human flesh is heir, has its types, ranging from mild to severe. When chronic, its beginning is almost imperceptible, yet it continues until the simplest food fails to nourish, producing great distress, and not unfrequently pain. Medicine fails to offer sovereign balm for the relief of such conditions. The person or persons thus afflicted are shut up to themselves to eke out a miserable existence with gloomy forebodings and dire pains. Did time and your patience permit, I might cite a long list of ills resultant from this subtle enemy of our race—dyspepsia, but a few more must suffice for the present occasion. The aliment taken by us is designed, as we well know, to supply the waste of the system, and keep the physical powers in that condition which will best enable us to meet the demands of our existence, whether mental or physical. If, therefore, this aliment is not properly digested, whether from quantity, quality, or weakened condition of the digestive organs, a most signal failure is the result; fermentation ensues, producing chemical changes, whereby gases and various acids are evolved. These gases, by their inflating power, distend the stomach, impeding its action, forcing it up against the lungs, consequently producing a sutbborn resistance to their full and free expansion. The acids irritate the nerves, which terminate in the digest-

ive tract, giving rise to peculiar uneasiness, and not unfrequently to positive pains. The whole tract takes on a more or less inflamed condition, the tendency of which is to check digestive secretions. If there is a dimunition of gastric juice, the power to digest meat is lessened, if bile is wanting, the power to digest fat is almost diminished. If the pancreatic fluid is checked, starchy foods ferment and irritate instead of digesting and nourishing. The whole system is bound together by mutual sympathy, through a wonderful class of nerves, and a disturbance at any point in the digestive tract gives rise, especially in highly strung nervous persons, to severe pains in remote parts. I doubt not that a great many, if not a majority of those who die from so called heart disease, are but the victims of indigestion. Have none of you been afflicted with that terrible premonition of death, commonly called "night mare?" Stagnation of the blood. The body sleeps—is dead almost. The brain having received notice of impending ruin, become alert, the sufferer is conscious of his condition, and makes frantic efforts to move. If he succeeds so much as to move a finger the life current is set in motion, and he rouses from this dreadful incubus. Should the effort fail, the person dies, and lo on the morrow we see in the mortuary reports—died of heart disease. It is a misnomer, and high time that the public mind be disabused of the idea and led to reflect upon cause and effect, that they put in practice such hygienic treatment as will best subserve their own good, and the welfare of those committed to their care. I do not wish to be understood as claiming that dyspepsia, with all its attendant ills, is referable to a pathological condition of the oral cavity and its organs alone, but I do say—*most emphatically*, that they are responsible for the major part of the troubles, arising from this *national* disease, as it has been rightly termed. Prominent among other causes, is excessive mental strain, unseasonable hours, want of rest, sedentary habits, want of sufficient out-door exercise, pure air, etc.

The query may be propounded, well, what am I to do? What course would you advise that the desired end may be accomplished? The vastness of the subject, and its many sided aspects will prevent me from entering upon it in detail just now. Every intelligent dentist should be able to give minute directions to all patients seeking advice. Suffice it to say, that the adult whose mouth has been neglected, whether from their own apathy as to the importance it sustains to their general health, or the neglect of paternal care, should seek the services at once of a competent, scientific dentist, who will save, as far as possible, the natural organs from the "debris" of decay. Supply, if need be, the missing ones, with properly adjusted artificial dentures. The teeth enter largely into the aspect of the human face, adding beauty and sweetness of expression to the countenance of the happy possessor of a full and regular set. Would you fully appreciate this fact, then contrast it with another, equally fortunate in other respects, but from neglect or other causes, presents a mouth filled with irregular, blackened or decayed teeth. We see at once the disparity, and the great importance they sustain to "good looks," aside from the more important function of digestion. There is another weighty consideration for the preservation of the natural organs. I allude to articulation, especially is it important in persons engaged in any vocation that requires much speaking. Only those who have lost a tooth know how difficult it is to articulate, and the trouble increases with each successive loss, until the unfortunate victim bites off his consonants, in the vain endeavor to render speech intelligible. Pardon me for the assertion, but the future of the child, and the world is dependent upon the mother. You may think that strong language, but the day is not distant when the fact will be universally acknowledged. Would that more spartan mothers could be found in our own fair Southland in this respect. The child receives its nourishment from the maternal parent, and if the supply is what it should be, a vigorous constitution is the result. That comes more

properly in the province of the family physician. Would that a more binding interest were manifest in this regard, by both patient and physician. I am constrained to say that should mothers manifest that interest in the after stages of dentition, that they exhibit in the detection of the first sweet sharpness of the budding pearl, many of the ills that their children are called upon to endure, might be obviated. The idea is too prevalent, that children's teeth are only temporary, and consequently are not worth saving. Oh, how we murder the innocents, or suffer it to be done. If perchance they are suffering with that terrible pain that Burns so vididly portrays, they are at once greeted with the consoling admonition, "shut right up, or I'll take you to doctor So and So, and have every tooth in your head taken out." How foolish! this should not be so. Confidence should be instilled in these younger patients, that they may recognize the importance of the preservation of their teeth. Nature does a great deal, but sometime she needs assistance. A very little at the proper time will often prevent serious trouble. If the temporary or dicidous teeth are preserved until nature indicates their removal, often a malposition of the permanent ones is avoided. I know that some contend that premature extraction does not contract the jaw. I readily concur with them, if the jaw bone proper, is referred to, but do not if the alveolus is included. That is a distinct formation, and whenever a tooth is removed, whether from a child or adult, the process absorbs—nature abhors a vacuum, the arch is lessened, hence there is not room for dental replacement. It is maintained by some—and eminent men, too, of the profession—that extraction of the temporary teeth does not create sufficient contraction of the alveolus to produce irregularity either in the period, order of eruption, or in any way interferes with the arrangement of the permanent set. My own convictions and observations are not in accord with such views. Some of the advocates of that theory, lay great stress upon the preservation of the temporary canine teeth, as they are considered the main

pillars of the arch. This is as it should be, for they are the last to give place to their successors—and if prematurely lost, the bicuspids crowd forward, throwing the permanent canine teeth completely out of line. Thus—the permanent canines—are not unfrequently the most sluggish in their ruption. I remember a case in my own practice. A young lady, of some twenty or more summers, made application to me for some dental work, and on examination, I found the right upper temporary canine tooth still in place, and on further investigation I had reasons to believe that the permanent one was still deep seated, but for fear my conjectures were wrong, advised the filling of the temporary one, which was acceeded to. Two years afterward, while on a visit to our city, she came to my office to inform me that the laggard had made its appearance. True enough, upon examination, I found the pearly point forcing its way downward to take position in the arch.

Quite a number of years ago, during my early practice, I had an occular demonstration of the dire effects of mistaken judgment. It was in the case of a young man in his teens, his mother being wealthy, and educated with all, naturally desired that her children should have every advantage that wealth could procure, both as to mental endowments and physical culture, but unfortunately was too far removed from needed dental surgeons that were capable of giving advice in this case. She applied to her family physician, to have all the temporary teeth removed, even before nature indicated their removal. He demurred, at first, but owing to persistent entreaty, yielded, not realizing the consequences. Her idea was, that if they were all removed there would be nothing in the way of the permanent ones, and her son, the pride of her life, would have a beautiful, unbroken set of permanent teeth, but alas! for her expectations. When I saw him, years after the murderous operation, he had all of his teeth, but in so crowded a condition that it was difficult to determine what course to pursue, that I might regulate them. This case is but one of many, and only cited to draw

attention to those seeking advice in this direction, that they may be fortified against the evil spoken of. If I were to follow the bent of my own inclination, this address might prove too prolix for your patience. I have merely opened the portal to the different subjects under consideration, leaving the more important part for you to eliminate, and put to practice. In conclusion, permit me to thank you for your kind and considerate attention this evening. I trust that this effort—though feeble—may awaken a more earnest interest—in some at least--of the vast importance this subject demands.

Dr. Merrill read a communication from a number of Dentists, requesting this Association to appoint delegates to meet in Washington, D. C., with a view of founding a National Dental Association, which was discussed by Drs. Merrill, Wagner, Catching, Chisholm, Dunlap, Morgan, Allen, Taft, and others.

Dr. Merrill moved that the Alabama Dental Association indorse the circular in regard to the organization of a National Association, and on motion of Dr. McWilliams, the motion was laid over, until to-morrow, as first business for the morning session.

Dr. McWilliams asked for information and the views of the Association in regard to granting license to applicants by the Board of Examiners. Drs. Dunlap and Taft expressed their views of the law.

The resignation of Dr. W. B. Pollard was received on his payment of all back dues.

Prof. J. Taft, on motion of Dr. T. M. Allen, was elected an honorary member of this Association. Prof. Taft acknowledged the compliment so conferred in a few grateful remarks.

The following resolution was offered by Dr. Dunlap and passed :

That this Association expresses its opinion that the State law authorizes the State Board of Dental Examiners to investigate Diplomas and if tainted with irregularities of a serious nature to reject such diplomas, and the Association will aid the Board in carrying out this construction.

Adjourned.

PHOENIX HALL, BIRMINGHAM, ALA., April 11, 1884.

FOURTH DAY—MORNING SESSION.

Meeting called to order at 8 A. M., by President Chisholm, presiding.

Minutes of the previous meetings read and approved. The first order of business being the motion of Dr. Merrill. The motion was re-read and adopted.

Dr. Dunlap, presented the name of Dr. W. G. Brown, of Atlanta, Georgia, as a corresponding member and he was elected.

On motion the President was authorized to appoint six delegates to the National Dental Association, and that the President be one of the number.

The committee appointed to draft resolutions on the death of Dr. J. W. Locke, presented the following, which was received and ordered spread upon the Minutes of the Association:

RESOLUTIONS ON THE DEATH OF DR. J. W. LOCKE, OF EVERGREEN, ALABAMA.

Whereas, J. W. Locke, a member of this Association having been removed from among us by the hands of Divine Providence, it is appropriate that we make a record of the event, and of the great loss sustained by this body.

Therefore be it resolved, first, That by his honorable character and devotion to our profession, he has won the esteem and affection of his co-laborers and members of this Association.

Resolved, second, That in his death we have lost a valuable member and supporter.

Resolved, third, That we tender to his bereaved family our heart-felt sympathies, and that a copy of these resolutions be forwarded to them, also be published in some Dental Journal.

J. C. JOHNSTON,
W. J. LUMQUEST,
F. G. MCELHANY,
Committee.

The Executive Committee recommended F. S. Cobb as a proper person to receive the scholarship offered this Association by the Baltimore College of Dental Surgery.

On motion the Association reimbursed the Board of Examiners for expense of publishing Call in Proceedings.

Dr. R. A. Holliday invited the Association to attend the meeting of the Georgia State Dental Society in May.

A vote of thanks was tendered the Press of Birmingham, also the various Hotels and Railroads, for courtesies extended, also to Dr. Eubank for use of office for clinics, also to Drs. Merrill and Lumquest.

On motion of Dr. J. C. Johnston, $8.00 was appropriated to Mr. Raubbles for services while in charge of the Hall.

The Association then went into the Election of Officers, with the following results:

President, WILLIAM R. MCWILLIAMS, Athens, Ala.
1st Vice President, GEO. EUBANK, Birmingham, "
2d Vice President, E. WAGNER, Montgomery, "
Secretary, CHAS. A. MERRILL, Birmingham, "
Treasurer, G. M. ROUSSEAU, Montgomery, "

EXECUTIVE COMMITTEE.

E. S. Chisholm, Tuscaloosa,
A. Eubank, Birmingham,
J. C. Wilkerson, Selma.

Montgomery was selected as the next place of meeting.

The Board of Examiners then made their report which was received.

Dr. Dunlap moved that a committee of three be appointed by the President to petition the next Legislature to make certain changes in the now existing law. Carried.

Moved that a vote of thanks of this Association be tendered Chisholm's Orchestra for the Entertainment given the Association, by them, and that the Secretary be instructed to send them a written copy of same.

Moved that a vote of thanks be tendered Superintendent Gude, of Pratt Coal & Iron Company for the delightful Excursion given this Association.

Also an extra vote of thanks be given Messrs. Morrison Bros. of Tennessee Dental Depot for use of Hall furnisned by them, for our meeting, free of charge, and also to Mr. F. P. O'Brien for use of Opera House. Adopted.

Adjourned to meet in Montgomery, Ala., on the second Tuesday in April, 1885.

E. S. CHISHOLM, President.
E. WAGNER, Secretary.

Minutes read and approved at Montgomery, Ala., April 14th, 1885.

T. M. ALLEN, Secretary, *pro tem.*
E. WAGNER, 2d V. P., Presiding.

SEVENTEENTH ANNUAL SESSION

OF THE

ALABAMA DENTAL ASSOCIATION,

HELD IN

MONTGOMERY, - ALABAMA,

APRIL 14th, 15th, and 16th, 1885.

PROCEEDINGS.

FIRST DAY—MORNING SESSION.

MONTGOMERY, ALA., April 1885.

Meeting called to order at 10:30 A. M., by 2nd Vice President, E. Wagner, of Montgomery, at Dr. Rousseau's office. Secretary, C. A. Merrill being absent, President appointed T. M. Allen, of Eufaula, Secretary *pro tem.*

Meeting opened with prayer by Dr. S. Rambo. Roll called and the following members were present:

2nd Vice President, E. Wagner, Treasurer, G. M Rousseau, S. Rambo, of Montgomery; H. D. Boyd, E. H. Locke, of Troy; T. M. Allen, of Eufaula; W. B. Steward, of Clayton; F. H. McAnnally, of Jasper; T. P. Whitby, of Wetumpka; J. R. McNair, of Haw Ridge.

Minutes of last meeting read and approved.

R. B. Chapman, of Troy, and C. R. Smith, of Fitzpatrick Station, made application for membership and were elected active members of the Association.

Dr. Chas. A. Merrill tendered his resigaation as Secretary by letter. Read by Secretary, and on motion laid over for action until to-morrow morning.

Communications from Drs. R. E. Watkins, E. S. Chisholm and C. A. Merrill, were read and received.

President appointed the following committee on membership: Drs. H. D. Boyd, T. P. Whitby and E. H. Locke.

Meeting adjourned to meet at Estelle Hall, corner Dexter Avenue and Perry Street, to-morrow morning at 9 o'clock.

SECOND DAY—MORNING SESSION.

ESTELLE HALL, April 15th, 1885.

Meeting called to order at 11 o'clock A. M., 2nd Vice President E. Wagner, presiding. Opened by prayer by Dr. S. Rambo. Roll called and the following members having arrived since last session, answered to their names :

President William R. McWilliams, of Athens ; S. G. Roberson, of Eufaula ; J. T. J. Watson, of Fataima ; A. J. Massey, of Rockford ; M. W. Evans, of Union Springs ; A. C. Walker, of Montgomery ; R. B. Chapman, of Troy ; C. R. Smith, of Fitzpatrick Station.

Visiting Dentists present : Drs. W. A. Patrick, of Evergreen ; J. A. Frazier, of Marion ; G. W. Slaughter, of LaFayette ; D. Beatty, of Evergreen.

President McWilliams having arrived, took the Chair and presided over the meeting.

Paying of dues being next in order, a recess of ten minutes was given to collect dues.

Minutes of yesterday read and approved.

Treasurer made his report and stated that there was $83.45 in the Treasury to date. Report referred to Auditing Committee. President appointed Drs. S. G. Robertson, A. J. Massey, and J. R. McNair, as Auditing Committee.

Dr. H. D. Boyd was given leave of absence on account of sickness in his family.

Dr. Boyd moved that the secretary be instructed to notify all absentees of their indebtedness to the Association for annual dues, and request them to remit the amount of their indebtedness as soon as possible.

On motion it was adopted.

Resignation of C. A. Merrill as secretary taken up and was accepted, and that he be requested to make a statement of work done by him the past year, and report at next meeting, and the secretary elected in his place instructed to so notify him.

Dr. Rousseau stated that he had invited Mr. W. J. Evans,

of McKesson & Robbins, of New York, to give a lecture on the use of Cocoaine at 11:30 a. m.

The physicians of the city were invited to be present and hear the lecture.

Mr. W. J. Evans was introduced by Dr. Rousseau, and he delivered a very interesting lecture on Cocoaine, and its use and effect.

The secretary received and read a telegram from Dr. E. H. Locke, stating that on account of illness of his child he could not return to the meeting, and invited the Association to meet in Troy next year.

Secretary Merrill having failed to notify committees and issue a call for the meeting, there were no papers to be read.

Miscellaneous business being next in order, Dr. Buck's local anaesthetic was brought up and discussed.

Dr. Stewart gave his experience with it, and he liked it, and thought it a great benefit, but that it was not perfect.

Dr. Rousseau gave his experience with Dr. Buck. Did not think it any better than other local anaesthetics on the market.

Dr. Whitby and others had tried it but it was not at all satisfactory.

Dr. Robertson said that if there was any member of this Association that had had it tried on themselves, he would like to hear their experience, that they could tell better the result. That he had it tried on himself, but did not like to state his experience. Subject passed.

Dr. E. G. Fowler tendered the Association a ride around the city this afternoon at 5 o'clock, to start from his drug store on Dexter avenue. Invitation accepted.

Moved that this afternoon be devoted to clinics. Carried.

Dr. Robertson was requested to give a clinic at the office of Dr. Rousseau on his method of combining gold and tin.

Committee on Clinics.—Drs. Rambo, Wagner and Rousseau.

There not being a quorum of the Board of Examiners

present, Dr. T. P. Whitby was appointed to act with the Board.

Adjourned to meet at 9 a. m. to-morrow.

THIRD DAY—Morning Session.

Montgomery, Ala., April 16, 1885.

Meeting called to order at 10 a. m.—President William R. McWilliams presiding.

Roll called, and Drs. W. D. Dunlap and J. C. Wilkerson, of Selma, and D. A. Brown, Gravella, arrived since last session, and answered to roll call.

Minutes read and approved.

Incidents of Office Practice was taken up, and cases stated and discussed by Drs. Whitby, Rambo, Stewart, Robertson, Rousseau, Allen, McWilliams and others.

Dr. J. C. Wilkerson gave his experience in replanting teeth, and stated that out of twenty-six cases recorded he had four failures.

Dr. Rousseau asked for the Methods and Experience in Root Filling; discussed by Drs. Rambo, Slaughter, Rousseau, Robertson and others. Subject passed.

The death of Drs. J. G. McAuley, of Mobile, was reported and discussed very feelingly by Drs. Dunlap, Rambo, Rousseau and Allen.

The President appointed Drs. Rambo, Robertson and Wilkerson a committee to draft resolutions on the death of Drs. McAuley and Johnston.

The Secretary reported that he had collected at this meeting—for initiation fees of new members, $10.00; for annual dues from members present, $54.00. Total collected by him and turned over to the Treasurer, $64.00.

The election of officers being next in order, the following were elected for the ensuing year:

President—J. C. Wilkerson, Selma.

First Vice-President—H. D. Boyd, Troy.
Second Vice-President—T. P. Whitby, Wetumpka.
Secretary—T. M. Allen, Eufaula.
Treasurer—G. M. Rousseau (re-elected), Montgomery.

EXECUTIVE COMMITTEE.

(President and Secretary *ex-officio* members.)

G. M. Rousseau, Montgomery.
S. Rambo, Montgomery.
W. D. Dunlap, Selma.

STATE BOARD OF DENTAL EXAMINERS.

William R. McWilliams, Athens.
E. S. Chisholm, Tuscaloosa.
W. B. Stewart, Clayton.
J. C. Wilkerson, Selma.
Samuel Rambo, Montgomery.

Auditing Committee reported Treasurer's books correct.

Committee on resolutions on the death of Drs. McAuley and Johnston made their report, which was read and ordered spread upon the minutes, and a copy sent to families of deceased.

TRIBUTE OF RESPECT ON THE DEATH OF DR. J. G. McAULEY, OF MOBILE, ALABAMA.

WHEREAS, This Association, having been informed of the death of our deceased friend and member, Dr. John G. McAuley, with profound sorrow and regret; therefore, be it

Resolved 1. That in the death of Dr. Jno. G. McAuley, that this Association has lost one of its most useful and best informed members; always at his post whether as a member of the Board of Examiners, or in the meeting of this Association.

Resolved 2. That we have felt the most profound sorrow

and regret at his loss to this Association as an active member, whether in its discussions or duties.

Resolved 3. That a copy of these resolutions be published in the Dental Journals, and a copy be sent to the family of the deceased.

SAM'L RAMBO,
S. G. ROBERTSON,
J. C. WILKERSON,
Committee.

Died at Bean's Station, E. T. V. & Ga. R. R., East Tennessee, June, 1884.

RESOLUTIONS ON THE DEATH OF DR. W. A. JOHNSTON, OF UNIONTOWN, ALABAMA.

WHEREAS, This Association has been informed of the death of our esteemed friend and member, Dr. W. A. Johnston; therefore be it—

Resolved 1. That in the death of Dr. W. A. Johnston, this Association has lost a useful and valued member.

Resolved 2. That we have felt the most profound sorrow and regret at the loss of this member.

Resolved 3. That a copy of these resolutions be published in the Dental Journals, and a copy be transmitted to the family of the deceased.

SAM'L RAMBO,
S. G. RORERTSON,
J. C. WILKERSON,
Committee.

Died at Uniontown, Alabama, 1884.

Dr. W. D. Dunlap spoke very feelingly and warmly of our deceased and honored member, John G. McAuley, and stated that he was one of the prime movers in the organization of the Alabama Dental Association.

Dr. Boyd also spoke warmly and eulogized him. He said and to him much is due to the present status of this Association.

Others spoke very feelingly of him. also of Dr. Johnston.

A vote of thanks were tendered Messrs. Moses Bros. for

use of Hall free, and to Messrs. Wharton & Leak for use of chairs and tables free. A vote of thanks was also tendered Dr. E. G. Fowler for the pleasant ride he gave the Association last afternoon, which was enjoyed very much by all.

Account in favor of Treasurer for expenses of this meeting, amounting to $4.00, passed and ordered paid. (A very cheap meeting.—SEC.)

Meeting adjourned to meet in Montgomery, Ala., on the second Tuesday in April, 1886.

WM. R. McWILLIAMS, *President.*

T. M. ALLEN, *Secretary.*

No call having been issued by the Secretary for the meeting, accounts for no papers being read at this meeting.

PROCEEDINGS

OF THE

ALABAMA DENTAL ASSOCIATION,

HELD IN

MONTGOMERY, - ALABAMA,

APRIL 13th, 14th, 15th, and 16th, 1886.

REPORTED BY

MRS. M. W. J.

PROCEEDINGS.

FIRST DAY.—First Session.

Tuesday, April 13, 1886.

The Alabama State Dental Association met in the rooms of the Montgomery Medical Association.

Called to order at 3:30 p. m.

The President, Dr. J. C. Wilkerson, in the chair.

Roll called by the Secretary.

OFFICERS PRESENT.

President, Dr. J. C. Wilkerson, Selma.
First Vice-President, Dr. H. D. Boyd, Troy.
Second Vice-President, Dr. T. P. Whitby, Wetumpka.
Secretary, Dr. T. M. Allen, Eufaula.
Treasurer, Dr. G. M. Rousseau, Montgomery.

MEMBERS PRESENT.

J. C. Wilkerson, H. D. Boyd, T. P. Whitby, T. M. Allen, G. M. Rousseau, S. Rambo, W. D. Dunlap, E. S. Chisholm, R. N. DuBois, Geo. Eubank, J. A. Hall, E. H. Locke.

The minutes of the last annual meeting were read and approved.

The President appointed the following committees :

On Membership—Drs. Geo. Eubanks, R. U. DuBois, and H. D. Boyd.

Auditing Committee—Drs. T. P. Whitby, E. S. Chisholm and H. D. Boyd.

The annual reports of the Secretary and Treasurer were read and referred to the auditing committee.

Dr. A. A. Pearson, of Autaugaville, presented his application for membership, which was referred to the committee on membership.

Dr. S. Rambo read a paper on Dental Chemistry and Therapeutics. After the reading of this paper, the subject matter was thoroughly and ably discussed by Drs. Rousseau, Rambo, Eubanks, and Chisholm.

(Your Reporter having been detained *en route* by high water and overflows, no record was kept of this discussion.)

A resolution extending an invitation to visiting dentists and the physicians of the city, to join in the discussion of subjects that may come before the Association, was unanimously adopted.

VISITING DENTISTS PRESENT AT THE FIRST SESSION.

Drs. J. H. Coyle, D. D. S., Thomasville, Ga., and professor of operative dentistry in the Baltimore College of Dental Surgery ; A. A. Pearson, Autaugaville, Ala., J. C. Morrison and J. D. Herblin, of the Nashville, Tennessee Dental Depot.

The executive committee reported the following hours for meeting:

Morning session—from 9 to 11 ; afternoon session, from 3 to 5 ; night session from 8 to 10.

Clinics Thursday, at the office of Dr. G. M. Rosseau, Dexter Avenue, from 11 to 2.

Meeting adjourned to meet at 9 o'clock a. m. Wednesday, April 14.

SECOND DAY.—First Session.

Wednesday, April 14.

The meeting was called to order at 9:45 a. m.

The President in the chair.

The session was opened with prayer by Dr. W. H. Morgan, of Nashville.

Dr. W. D. Dunlap, of Selma, introduced Dr. J R. Walker, and Mrs. J. R. Walker ("Mrs. M. W. J."), of New Orleans.

The roll was called and the following members were present:

Dr. J. C. Wilkerson, President; Dr. W. D. Dunlap, of Selma, Drs. H. D. Boyd, T. P. Whitby, T. M. Allen, G. M. Rousseau, S. Rambo, E. S. Chisholm, R. N. DuBois, W. W Evans, Geo. Eubank, J. A. Hall, E. H. Locke, S. G. Robertson, R. B. Chapman, D. A. Brown, E. Wagner, and A. Jackson.

Prof. W. H. Morgan, of Nashvile, J. H. Coyle, of Thomasville, Ga., J. R. Walker, of New Orleans, H. B. Williams, of Mississipi, L. H. Henley, of Burnt Corn, Ala., S. B. Harris, of Livingston, J. R. Barr, of Eufaula, W. F. Slaughter, of LaFayette, C. L. Boyd, of Troy, Ala.

The reports and papers of committees were called for.

The auditing committee reported the secretary and treasurer's books correct.

TREASURER'S REPORT.

Cash received since the last meeting.....	$159.45
Expended.....	45
Balance cash on hand	$159.00

On motion report accepted and approved.

The secretary reported expenses.....	$19.45

On motion approved.

The committee on membership reported favorably on A. A. Pearson's application. A ballot was taken and Dr. Pearson was elected to membership.

Dr. J. R. Barr, of Eufaula, made application for membership, and his application was referred to the committee on membership.

Payment of dues was next in order, after which a recess was taken.

Upon resuming business reports of standing committees were called for.

Dr. H. D. Boyd, of Troy, chairman of the committee on Operative Dentistry, read a paper Cohesive Foil.

COHESIVE FOIL.

In place of a formal report on operative dentistry your committee offers you a paper, believing that thereby the spirit of their work is better complied with than if a formal report with no paper were offered, and if in this paper there are faults it is yours to criticise; if old positions are taken instead of new, do not make the charge that originality is claimed for them.

The field is so broad, the work so important, that had it not been predeterminded to elect one and measurably leave other subjects to their fate, we would stand so appalled at our work that you perhaps would not be afflicted with even this. With one word more of appeal to your forbearance, or possibly sympathy, I will turn to the discussion of cohesive gold. That word is, that it is easier to think what you would like to say than to choose what you should say, particularly on a subject that has been so frequently and ably written on as this.

It was my lot but a few days ago to be called on by a lady of refinement and wealth who had been in the hands of a dentist of national repute. The teeth had been filled six times within the space of fifteen years, and more than one hundred dollars each time had been paid for filling, yet one filling alone remained in part out of six; the cavities were all in the superior incisors; these had lost substance by decay, by file, by fracture until they stood as a tumble down ruin, wounding the pride, and producing an ugly lisp of speech that made my fair patient lose much of the confident reliance on the skill and attainments of dentist; the right central will be used to illustrate, it being decayed on both lateral surfaces from below the gums and was broken away on the right obliquely from near the gums to the centre of the incising surface, with no locking or anchorage room at this point; on the left the anterior or labial portion of the enamel stood so thin as to be transparent, while the palatine surface was gone somewhat in the shape of the half of the

letter "u" inverted; this tooth was no worse than the other three. To fill this tooth the first thing done was to carefully remove soft decay, or pulpy matter, then with a chisel cut away jaged margins, then covering with the dam, a bit of waxed floss silk was tightly drawn around the neck of the tooth three times, band and weights of course being used to keep the dam out of the way, then the more careful removal of decay was followed by cutting as broad and long a basal grove around the cervical wall as could be without too great a compromise of strength, then for the right side an angular but delicate groove was cut on both sides of the pulp to a point of union beyond the end of the nerve, near to the incising surface of the tooth, the utmost care being taken not to uncover the living nerve, and at the same time to leave as much of the bony structure of the tooth attached to the enamel as could be, then introducing a delicate covering of oxyphosphate cement as nonconductor, the gold was prepared by taking No. 4 cohesive foil, and with plier tearing it into square bits of assorted sizes, lifting a piece at a time with pliers in the right hand, with left forefinger and thumb, it is rolled loosely into an egg shape pellet, long experience and careful experiment having taught me to take no stock in the teaching that the working qualities of gold are interferred with by handling with clean fingers. The finger made pellet is used as being better adapted to this work than any machine made pellet or cylinder.

Now, with clean pliers passing the gold through a spirit flame, it is carried at once to the cavity and placed first with a plugger by hand, then gently malleted into the basal grove most likely to easily retain it steadily in place, then adding pellet to pellet until the foundation is fully secured and the cervical margin of the cavity is well covered, then advancing along the groves to the point union, malleting each bit of gold well into place, having thus secured the locking flange into every possible place that will add strength to your filling, proceed to build out in the usual way so as to leave the tooth, shaped as near like nature made it, as

the nature of the case will admit, using the mallet yourself (not an assistant), which having both hands free you can easily do.

Having spread this paper out to so much greater length than anticipated, I will go into no more details, but will say that to bring gold close; yes, so close to even the thinest, most frail wall of enamel, so that it will not leak, and that too with the minimum risk of fracture, I find the mallet in my own hand a success, both as to labor saving and permanent results, having tried the various machine mallets, as well as well trained assistants; that all margins should be covered with gold, well beaten down when gold is the filling material used, that the more frail and delicate the tooth the greater the need to use gold if it be incisive or bicuspid, that in many cases it is far better to use alloys than tax yourself and patient with gold, if away from the front of the mouth, that it is easier when once a familiarity with the material is acquired, to give proper protection to the tooth operated on, and reputation to yourself, by the use of the cohesive gold than non-cohesive. That while abundant space or access to the cavity should be had, wedging and the use of the chisel should be resorted to, the file being the poorest of all means for such, and the most offensive to the patient.

Which on motion was accepted.

There being no other papers from the committee, the subject of the paper was declared open to discussion.

The paper was a report of a case in practice.

Dr. S. Rambo, of Montgomery, asked for minute details as to the method of carrying the gold across, from side to side.

Prof. W. H. Morgan opened the discussion with strong condemnation of the practice of cutting deep cervical groves. The tubuli being cut through, the outer flange of dentine is devitalized, and decay follows at the cervical walls. If approximal cavities reach to the cutting edge, the gold should be carried clear across, even if sound enamel has to be cut away for this purpose, otherwise frail corners will

break, and the cutting wearing down will cause leakage at the margin of the filling.

Dr. W. H. Morgan, of Nashville, said that the paper was the relation of one incident of office-practice, with but a mere allusion to general principles. He wished to make one or two points as to the method of preparing the cavity. He objected most emphatically to the deep groove in the cervical wall, as tending to impair vitality.

Dr. Boyd here stated that the groove was not deep, only sufficiently so to steady the gold and retain it in position.

Dr. Morgan enquired "how deep?"

Dr. Boyd replied about ½ line in depth, and a little more in breadth.

Dr. Morgan said that a groove of that depth would cut through the tubuli of the dentine, and the outer flange would be divitalized and decay ensue; that the tubuli incline inward, obliquely towards the end of the root, and the inclination of the tubuli should be the guide as to the depth of the groove. That dentine divitalized by this method was the cause of subsequent decay at the cervical walls of cavities—never make deep grooves in the outer walls, especially of superior incisors and cuspids; the tubuli incline sufficiently to afford all the hold necessary; if the gold is disposed to move about, it can be retained in place with one hand and condensed with the other. With the mallet, gold can be built up against the frailest walls. If very badly decayed the gold should be carried from one side to the other, across the cutting edge of the tooth, even if sound enamel had to be cut away for this purpose. This is especially demanded where the cutting edge is worn down, if filled only on the approximal surfaces, the tooth will continue to wear down, and reaching the edge of the filling will cause it to leak at that point if the gold is built across the cutting edge, it will make a permanent operation. He described the case of a lady whose upper front teeth had been separated by a vigorous use of the file, and consequently decayed on all the approximal surfaces. He built them

out, restoring the contour, flush with the cutting edge. The cutting edges wore away to absolute cavities, and in from ten to twelve years he had to refill the six front teeth, building across the cutting edges, which made a durable operation. Dr. Morgan described another case, that of a young man whose teeth had also been severely filed. The teeth were divitalized, with very thin walls, and the cutting edge broken down. He found a broach passing from $\frac{1}{2}$ to $\frac{3}{4}$ of an inch through the foramen of one. He treated the abscesses, filled the roots, and built across the cutting edges, the teeth being now clean and smooth. In young persons, under thirty years of age, with approximal cavities on both sides, extending to the cutting edge, would always shorten the tooth, if not already worn, and build across the cutting edge. The gold used should be of a make that hardens under the mallet, such as the old Johnson's gold.

Dr. Morgan asked Dr. Boyd why he carried his pellets into the flame of his lamp?

Dr. Boyd replied—to increase its cohesion.

Dr. Morgan inquired why he used gold that was not at its maximum of cohesion? That there were men who made it their special business to anneal gold, and that no dentist could afford to do it in his office; that was the point in first-class foil; that Chas. O. Abbey did no other work, handling every sheet separately with his own hands; that any chemist could refine the gold and prepare it for heating, but only one man in the manufactury has the secret of annealing perfectly uniform and regular. Of a batch of gold which is refined and melted and made into ribbons and laid away in the safe—on Monday, three ounces may be annealed and work exactly right; on Tuesday, exactly the same process may be employed with another lot from the same batch, and yet not work at all. The same is true of sponge-gold; one day it will succeed, the next day it will not. We do not know why. We infer that it is due to electrical conditions, or infer anything we choose, but we do not know. It is utterly out of the question for any man to undertake to an-

neal his own gold and have it uniform. Sometimes the alcohol in the lamp will be too low; sometimes the wick will be too high, or something else will be wrong. All that the dentist should dare to do is to warm his gold to drive off any possible organisms, or filen from the surface.

Sulphuric acid in the atmosphere, from burning coal, or free ammonia from any source, will render gold non-cohesive. If heated to a cherry red the relations of the molecules are changed, and every man will make failures who undertakes to anneal his own gold.

Dr. G. M. Rousseau asked if he did not pass his gold through the flame in warming it?

Dr. Morgan replied that it was better to lay it on a plate, or in an oven than to bring it into actual contact with the flame, as the least smoke would injure the surface of the gold.

Abbey's gold is always fine, and can be rolled or folded, or put into any desired shape. When passed through the flame, it has a peculiar smell which can not be defined, probably from some chemical used in its preparation, though Abbey will not tell what it is.

Dr. S. G. Robertson, of Eufaula, inquired if Watt's sponge-gold and some other forms were not considered reliable?

Dr. Morgan said he did not know about Watt's gold at present.

Dr. Robertson said it was prepared by electricity, and was very satisfactory to him; much more so than ten years ago.

Dr. Morgan said that electrolysis was only employed to remove any possible murcury from the gold; that it had nothing to do with the annealing process.

Dr. Boyd said he felt complimented by the lengthy discussion of his paper, but there was nothing in it to indicate harsh treatment of the tubuli; that he always made a special point of considering the strength of the tooth, as well as of the filling; that he did as little cutting away as possible; that though he objected to the deep groove himself, he

thought imperfect filling were likely to be the cause of failures. With all due regard to the gold annealors, every dentist would find times when his gold would fail to adhere, even where the first sheets of the same book had worked well, when it became necessary for him to anneal it while working. A man who relied on always using his gold just as it came from the depot would be *badly left* sometimes. It was, of course, essential to have a clean lamp, alcohol as nearly pure as possible, and everything in good order, and then pass your gold boldly through the flame if it fails to adhere—would heat his gold to redness, but not to white heat —would always restore cohesion in the flame, when lost from any cause.

Dr. Geo. Eubanks, of Birmingham, inquired if all pure gold was not cohesive ?

Dr. Morgan replied that he did not think so, when exposed to the atmosphere it would deteriorate.

Dr. Eubanks said that when subjected to such exposure, it was no longer pure.

Dr. Morgan said that cohesive gold, when properly prepared, would not deteriorate. That a certain dentist ordered a certain quantity sent to him every month, in order to have it pure; that Abbey had such confidence in his gold that he laid the year's supply out on top of his safe, and sent to him from that lot, the dentist not discovering any difference. The difference in gold is due to its not being perfectly uniform. Chase, of Augusta, or Columbus, Ga., before the war, made a gold, which was beaten in folds of vellum, when held up to the light was porous as cotton cloth, but it was not uniform. Ffteen years ago David Morgan claimed to have made a discovery by which he could produce a gold that would be perfectly uniform. He went to S. S. Whites & Co., and wanted them to take hold of it and sell it. They consulted the superintendent of the mint, who hooted at the idea of any possible uniformity, one day after the other. However they investigated the matter and were convinced, being forced to admit that "the old goose had stumbled

upon a grand discovery that no chemist or metallorgist would ever have made." It was sold for some time as Morgan's gold, and is now known as the Globe foil; it is the only foil which is entirely uniform; he had never found but one defective ounce. Gold might be perfectly pure when beaten out, but be left harsh, with but little cohesion; by heating it to a cherry red, molicular changes might be induced which would render it cohesive, but without being pure.

Dr. Geo. Eubanks: Does not the heating tend to purify it.

Dr. Morgan: No; the heating merely frees it from foreign substances on the surface.

Dr. W. D. Dunlap, of Selma: Steel or any other metal, is hardened by heating.

Dr. Morgan: If a bar of pure tin is bent, the relations of the molecules are changed, it will not bend back in the same place. Cohesive gold will not fold in a round fold, it will crease, and will not fold back in the same place. Changes have taken place in the relation the molicular crystals.

Maximun cohesion is maximun softness. The most cohesive gold is the most soft.

Dr. J. R. Walker, of New Orleans, one of the visiting dentists, to whom was extended the privilege of the floor, said that he desired to express his thanks for the courtesy, and also to offer a criticism, and a few remarks on the paper read. He said that dentists, acquiring the habit of talking low and confidentially to their patients, were apt to forget to speak louder in Associations. That this should be borne in mind, as much that was valuable was lost to the world from that cause.

He said that he regarded as especially sound, the remarks of Dr. Boyd, relative to the use of the file, and was glad to find Dr. Morgan in accord in that respect. That it was a fearful mistake ever to be guilty of filing away approximal walls. Teeth that were so isolated, requiring support soon come together again, thus reducing the arch, and doing

great mischief. He said that every observant man, who had had much experience with the plastics—as the oxy-chlorate or the oxy-phosphate of zinc—knew that they take hold of the tooth, and have a preservative effect, while the action of gold is only mechanical. Again, with the plastics, we avoid all necessity for any groove. In very large cavities, as where a mere shell of enamel is left, the great bulk of the filling can be made of plastic material, and in that, an anchorage cut for a gold surface, touching the tooth with gold only at the margins, the strength of the filling lying in the anchorage of the gold in the cement. Teeth which would to continue to decay under gold, would not decay under the phosphate. As the cements wear down, however, the masticating surface, or cutting edge can be thus finished with gold, making a durable operation, and preserving the tooth from further decay. He recommended building the cutting edges with platium-gold, which being nearer tooth-color, disguises the operation while giving the necessary hard surface.

Dr. W. D. Dunlap, of Selma, found the greatest difficulty to be in the length and thinness of the cutting edge. If worn down, it was easy to cut a groove, and not show the gold in front. The greatest trouble was with thin teeth so decayed as to reach the cutting edge, leaving the corners unsupported. For the last few years he carried the filling across the whole cutting edge, never leaving a thin edge; if only one approximal cavity would fill across making a letter "L," or the reverse; otherwise would cut away both corners, shorten the tooth, and build down to restore the line of teeth. If thin cutting edge, or weak corners are left, candy or ice, or a bit of bone, will soon chip it off. As to the kind of gold to be used, or the question of annealing, each operator must be his own judge, guided by his own experience, as to what is best for him to do.

Dr. J. R. Walker, of New Orleans, asked Dr. Boyd, regarding the teeth which had been "filled repeatedly," whether it was due to the character of the teeth, or to the character of the work?

Dr. Boyd replied that the teeth were very brittle; that he relied more on the filling than on the tooth-substance.

Dr. Walker said that a very common error lay in failing to impress upon patients the necessity of taking proper care of their teeth, after the work was done, and of keeping up the character of the tooth-substance by such diet and other means as would supply the necessary elements. The last operator may have done his work well, but failing to give instructions as to the care of the teeth, they would decay above and around the fillings, no matter how well the work might have been done. We must preach as well as practice.

Dr. R. B. Chapman, of Troy, said that he had seen teeth that had been filled by Dr. Morgan, fifteen or twenty years ago, that were as good now as then. All the thin portions had evidently been cut away. If good retaining points could be had would only build up the approximal surfaces. He considered gold the best material ever used. Some used tin-foil, but only because it was easier worked into retaining pits—it had no other advantage. If there was anything better than gold he would like to know it, and why it was better.

Dr. T. M. Allen, of Eufaula, was ready to take issue on both points, both as to gold being the best material, and as to tin being easier to work than gold. Everything depends on the character of the tooth. There are many failures with gold where cement would have saved the tooth.

Dr. Chapman considered it entirely the fault of the operator if gold failed to save the teeth. The loss was due to leakage from poor operations.

Dr. T. M. Allen said that he had to admit that his gold fillings sometimes failed, and he wanted to know why it was. He had seen gold and tin put in by the same operator, at the same time, and with the same skill and care, the gold proving a failure, the tin preserving the tooth. He wanted to know why it was so.

Dr. W. H. Morgan wished to call attention to the remarks

of Dr. Walker about the cement fillings. Cement makes absolute contact with the entire surface of the cavity. With gold, there is not one case in ten where there is absolute contact at all points. The enemy which we fight is outside; we want to shut him out, and this can be done more perfectly with the cements than with gold. The cement is an impalpable powder, which works its way into the mouths of the tubuli, and in this way is invaluable in preserving the tooth. Where teeth are very frail, and cavities very deep, they can be filled full with cement, and after hardening an anchorage can be cut out, leaving strong walls, and a body of cement, presenting a visible surface of gold. It is universally used now for partly filling all large cavities. Dr. Redman, of Louisville, claimed to have been the first to use it in this way, but Morgan "gave it away," and is the first on record. Fill the cavity with cement; when crystallized, wall in with cohesive gold; one will help the other out, making a combination-filling. He objected to undercuts and retaining points, on general principles, though we can not always do without them.

Dr. Dunlap considered retaining points necessary, and did not object to them.

Dr. Morgan said each one was bound to his patient to do the very best he could, in his own individual judgment, but not necessarily the best in the world. If the tubuli were cut off their function was destroyed, and dead dentine and enamel the result. If the cavity is very deep, running beyond the margin of the gum, retaining pits may be made as the cementum has a living wall beyond, another source of life, vitality coming from another direction. Devitalization of any part of nature's structure should be avoided. The structure covering the root of the teeth stands between the living and the dead, protecting the latter through the foramen.

Dr. Boyd enquired if Dr. Morgan meant to say that cutting the tubuli of the incisors produced a tendency to decay?

Dr. Morgan: Certainly; it cuts off the source of life.

Dr. Boyd: You take that position, decidedly?

Dr. Morgan: I certainly do.

Dr. Boyd: Then how is it that a devitalized tooth lasts longer than a live tooth?

Dr. Morgan: I deny that it is so. When vitality is destroyed, there is no resisting power; all vital force is gone.

Dr. Boyd: Do you always try to save the pulp?

Dr. Morgan: The pulp is the tooth-builder. When the tooth is complete, the function of building ends; but it has still a little work to do; nutrition must be carried on; but with advancing years the pulp grows smaller as it has less to do, and in old age little or no pulp is left; there is nothing for it to do. In a child of seven or eight years of age the pulp is an absolute necessity. If the pulp dies, the tooth is lost, for the root is not yet entirely built; its building function is not fulfilled. At that age there is a great funnel-shaped opening, which constantly decreases. A tooth may continue to exist without pulp, but there is a constant retrograde movement. There is less cohesion in its particles; it becomes more friable; more liable to break, a constant crumbling away—going back to dust.

Dr. J. H. Coyle, of Thomasville, Georgia, said that while he admitted the truth of the statement that in cutting a groove at the cervical wall, the microscopical arrangement of the tubuli being cut, that portion of the periphery, the dentine, was devitalized, that portion of the dentine being cut off from the source of nutrition, the pulp. Yet the question is, however, what actual effect does it produce in that portion of denture?

Dr. Morgan: If the patient lives long enough, that portion will die, and decay with recur.

Dr. Coyle: That is, a devitalized tooth is *subject* to decay, but does not actually decay. Is not that a paramount consideration? If reacted on the theory, then, a devitalized tooth should be condemned and extracted.

Dr. Morgan: They do often last a long time; the tooth

does not immediately decay in the cut-off portion—perhaps not during a lifetime; but the *theory* holds good nevertheless; it is the rule; it is my theory; I am the first on record for that, as also for that of the vitality of enamel. There are teeth in this room that I filled many years ago—filled in my bungling way, though I admit that I cannot fill roots without enlarging the canal.

Dr. Coyle said he had seen the theory advanced in the journals several years ago, but did not know that Dr. Morgan claimed it.

He asked why all the dentine did not decay in teeth that were devitalized by the destruction of the pulp?

Dr. Morgan said if there were fillings in approximal cavities, in pulpless teeth, decay wold always occur at that point.

Dr. Walker said that devitalized teeth had great powers of resistance, as a rule; that the function of nutrition was two-fold; the supply of pabulum and the removal of debris.

If other conditions were favorable, in an individual at the age of maturity, if the albumen of a devitalized tooth was carbolized, the tooth would remain firm and good for a lifetime. That live teeth would go to pieces faster than dead ones if the demand for nutriment on the part of the live teeth was not met by proper supplies.

Dr. Morgan said that he denied the premises though he admitted the results.

If conditions and surroundings could produce a paucity in tooth-building elements, then we might have these results, but there was no such lack of earthy materials.

There was not a place on the face of the earth where ample supplies could not be obtained. Even the poorest of all food, rice, or the finest bolted flour, or any other article of food that can be selected, furnishes more than nature calls for.

Dr. R. U. DuBois, of Greensboro asked why, if this is the case, do all higienists recommend Graham flour, oatmeal, etc., as necessary for the supply of certain elements?

Dr. Morgan said that 100 lbs. of bread made from fine bolted flour, would give 2½ lbs. earthy material in a year, or 17½ lbs. in seven years, while the human skeleton, according to Huxley, weighs only from 6 to 6½ lbs. Even from rice alone we would get ten pounds in seven years.

Dr. Walker said that Dr. Morgan denied his premises; that denial could be met by denial but that was not argument. He would only ask why, if the supply of limesalts could be limited in proportion to the weight of the dried skeleton, why not limit other supplies in the same proportion? Why should we take in 100 parts of oxygen for every four parts utilized by the lungs?

How many times the weight of the body do we eat every seven years? The teeth of residents in the Mississippi Delta are very poor from lack of limesalts in the products of the soil and in the drinking water.

Dr. Morgan said that all the rivers of the west carried disintegrated lime, which was deposited by the Mississippi river in the southern bottoms, enriching them for all vegetation.

Dr. Walker replied that the inhabitants do not eat the cotton which is raised in the Mississippi bottoms, nor drink the Mississippi river water.

Dr. E. S. Chisholm, of Tuskaloosa, said that this was outside of the topic under discussion, although of great interest, and that the real object of Associations was the exchange and interchange of thoughts and experience, for the benefit of younger members. Returning to the point of cutting the tubuli. It was a very pretty theory, but was it true in fact? If the dentine was thus devitalized the enamel must be equally so. If the cutting edges are cut off, the tubuli which extend to the periphery are all cut across. The practical point was to render the cavity accessible, and to so fill as to prevent any accummulation of food, teaching patients the paramount importance of strict cleanliness. All exposed dentine should be covered with gold, and the teeth made to touch at a rounded point; if two flat surfaces

come together, food would accumulate, and the condition be worse than before; the point of contact was most important as the point most liable to decay. The use of cement is not sufficiently inculcated. We use it as a rule when patients are not able to pay for large gold fillings, as a matter of economy, but the fact is it saves teeth that gold would not save. I have a case in mind. Teeth which were decaying rapidly five years ago, I filled with Caulks diamond cement, and they are now in good condition.

Dr. Morgan: Do you not find that the cements disintegrate rapidly in some mouths?

Dr. DuBois: Gutta percha is good in such cases.

Dr. Chisholm: Gutta percha yields, and it cannot be built up like the cements.

Dr. DuBois: I find that the phosphates wash out in many months.

Dr. Morgan: Gutta percha wastes away all over the surface. Cement will keep to the walls of the cavity and protect the tooth, though worn down in the middle. It will not disintegrate next to the tooth as in the centre.

Dr. S. G. Robertson: Gutta percha fillings wear out in a saucer shape, leaving a thin lining over the walls of the cavity, protecting from further decay, but not keeping the shape of the tooth.

Dr. DuBois said that even wax, if perfectly adjusted so as to seal the cavity and exclude air and moisture, would prevent decay, so long as it remained in position.

On motion of Dr. Dunlap, the paper was passed.

The committee on membership reported favorably on the application of Dr. J. R. Barr. A ballot was taken and he was elected to membership.

On motion the rules were suspended for an informal discussion.

On motion of Dr. T. M. Allen, the subject of Sponge Grafting was taken up.

Dr. Morgan was asked for some remarks on the subject. He replied that he knew nothing about it, except what he

had read in the Journals. Had not experimented at all.

Prof. J. H. Coyle was next called upon.

He said that he had had some experience in the method, and had had several clinics. He could only hope to call attention to details of operation. That Dr. Atkinson had first presented the subject to the dental profession, and that he had seen several of his operations which were eminently successful. The methods of preparation and application were so simple, that any intelligent man could apply one, and obviate a scar or cicatrix. The essential points were to have the finest surgeon's sponge, free from all foreign matter. The sterilizing fluid consists of fifteen grains of bichlorate of mercury, to one pint of distilled water at a temperature of from 130 to 160, and kept at this temperature from five to thirty minutes, regulated by the degree of heat, the longer time for the lesser heat. The surface of the wound if necessary, must be scarified to produce a fresh wound, as no organization will form without blood. The sponge must be trimmed to the contour of the space to be filled, without any undue pressure which would induce inflammation and suppuration—keep in place with a bandage or adhesive plaster. If in the mouth, lay paper over it, or cotton. In three days it will have attached itself. The medical fraternity were in some doubt as to what becomes of the sponge—it was thought to be converted into organized matter. It is probably removed by absorption. The aseptic condition of the sponge acts as a matrix to hold protoplasmic matter from the blood, allowing a reproduction of tissue. It penetrates the intustices of the sponge like the rootlets of potatoes in a chaff bank; blood vessels are improvised. In its practical application we have the reproduction of tissue in any portion of the body.

A large piece of necrosed bone was exhibited, which had been removed from the angle of the jaw of a patient of Dr. Pearson, M. D., of Montgomery.

As there was a fistulous external opening, which would heal with a puckering scar, it was proposed, if the patient

was willing, to insert a sponge graft. In that event, all could see a practical illustration of the method of the application.

Dr. Morgan inquired if the sponge was applied directly from the antiseptic bath, or first washed?

Dr. Coyle replied that it was taken direct from the bath. Another point to be borne in mind was that the sponge must not be disturbed. If any suppuration ensued clip off a portion of sponge at that point, and insert another piece, scarifying the surface to produce fresh pabulum.

Dr. Dunlap inquired if the method was applicable to the gums?

Dr. Coyle seplied that it was applicable in every case of lost tissue, or from abscess or tumor.

Dr. Dunlap inquired if it would answer when the periosteum was destroyed?

Dr. Coyle replied that it would restore every tissue except bone. It prevents a septic condition after the removal of tumors, or wherever there is lost substance.

Dr. Geo. Eubank asked if the lost tissues were fully restored, without cicatrix?

Dr. Morgan said that it was simply a matter of general principles, and easy to understand. It was similar to the use of animal sutures to close wounds, relying on the action of absorbents to carry the material off through the system. In the extraction of a tooth the same process is carried on; blood fills the cavity and forms a clot; after two or three days, small capillary vessels are seen stretching across; organization goes on, forming a new structure which is not scar-tissue. The cavity is filled up, and the parts healed, without a cicatrix. Later on all this is gradually absorbed and bony tissue fills the space. The sponge is evidently broken down and carried away by the absorbents. Foreign substances are disposed of in this manner. A fibrous cyst of every low organization is formed, around the object, as a bullet or it is ejected, through the processes of inflammation and suppuration, with gradual contraction,

like a splinter, if left alone; or by absorption, which involves a breaking down, liquifying fluid condition, if inorganic, as limesalts from bone tissue; it is reduced to Molecules and floated off.

Dr. Geo. Eubank asked if cavities of extraction were filled with cotton arnica, etc., to relieve pain?

Dr. Morgan replied that it was only to arrest bleeding.

Dr. A. T. Pierson, of Autaugaville, said that Dr. Atkinson filled such cavities with sterilized sponge, which left no hollow. This had been done at a clinic in his recent course, which he had witnessed.

Dr. E. S. Chisholm, of Tuskaloosa, thought that the system would prove very beneficial in dental operations, affording a remedy for those deep lesions where pus had been allowed to burrow down through bone and soft tissues, leaving puckered, disfiguring scars. He inquired if it was necessary to trim away scar-tissues, where the surface had already healed?

Prof. Coyle replied that it was essential to dissect out all cicatricial tissue, applying the sponge to a fresh bleeding surface.

Dr. J. R. Walker said that he had had some experience in sponge-grafting, though not altogether satisfactory. His first patient was a gentleman between 45 and 50 years of age, having the inferior central incisors denuded to the ends of the roots, and the teeth very loose. He ligated the teeth, and took an impression of the parts, building up the lost tissue, on the cast, with paraffine, cutting the sterilized sponge so as to exactly replace the wax. He made small plates, inside and outside, ligated together with silk floss passed between the adjoining teeth, thus retaining the sponge in position.

The day after the adjustment, the patient was called away to New York. By his advice, he called on Dr. Atkinson, who examined the case and reported very favorably. One month elapsed before the patient returned; the sponge was then found to be very foul, and without any attachment.

Fresh granulation had taken place, all around the margins, and fresh sponge was adjusted; this also failed entirely to attach, but by keeping the parts well protected with thin plates, and washing out frequently, treating alternately with Hamemilis and calendula, the results are very satisfactory in the growth of soft tissue, fully one-half of the tissues being now reproduced, with a continuous though slow growth. On one side, the attachment to the tooth is quite firm; on the other, where the periosteum is entirely destroyed it is a loose flap of gum tissue, held in place by its connection with the other side, in the growth from the bottom up, where it has formed fully one-eighth of an inch. He had several other cases of treatment; one, a gentleman of 60 years of age, where the reproduction of tissue is very satisfactory, attaching firmly all around the margins.

These cases, however, can hardly be called sponge-grafts, as no sponge is used, but the reproduction of gum-tissue is very satisfactory though the attachment seems doubtful where the periosteum is entirely destroyed.

Dr. Geo. Eubank, of Birmingham, inquired if the system was applicable in cases of cleft palate or harelip?

Prof. Coyle replied that the only difficulty would be the retention in place; that in cleft palate it would be liable to pass through into the central cavity. According to Dr. Atkinson, whenever the surface was or could be denuded, success might be predicted.

Dr. Morgan said that as the cementum obtained its nutrition through the periosteum, whenever the cotton was destroyed the source of nutrition was cut off; a dead body and a live body could not come in contact and live in harmony. A tooth which had been extracted ten years, if thoroughly cleansed, might be introduced into a fresh socket and be retained. Scar-tissue would be formed and fibrils penetrate the caniliculi of the cementum. Even a porcelain tooth might be retained and do good service for a time, but there would be no positive reunion; the living and the dead would not grow together. It was however, an important step in gen-

eral progress if healthy tissue could be made to grow up and retain the tooth in place. In case of absorption from ptyalism, it was a very important step to be able to obtain a new growth. He congratulated D. Walker on his reported success in that direction.

On motion of Dr Geo. Eubank the Association adjourned until 3 P. M.

SECOND DAY.—AFTERNOON SESSION.

WEDNESDAY, April 14.

Called to order at 3 p. m.

The President in the chair.

The President, J. C. Wilkerson, D. D. S., of Selma, then read his annual address.

Gentlemen of the Alabama Dental Association:

In addressing you on this occasion I wish to express my appreciation and sense of gratitude to the Association for conferring on me the honor of this office, and also to ask the privilege of calling your attention to some duties which fall to us as dentists.

Every profession has its distinctive duties, and ours is no exception. Dentistry has had wonderful growth. Forty-five years ago there was not a Dental College in the world—while the barber and the blacksmith each claimed dentistry as a part of his work.

In 1839 the honored Chapin A. Harris obtained from the State of Maryland a charter for the Baltimore College of Dental Surgery; and right then and there the seed was planted which has continued to grow until the world has been filled with its fruit, and still it is growing. Dental Colleges have been founded in many places, while quite a number of Medical Colleges have already added a Dental

Department, and others will follow. Having grown to such proportions Dentistry has its own sphere, and work, and regulations. As a distinctive profession it has its distinctive duties.

The nobility of duty is the same in all callings, and all professions. Why not magnify the honor which belongs to those who do well their part in the profession of Dentistry? Duty here is not less demanded, and when well performed is not less honorable, than duty done in any of the noble callings which have for their aim the amelioration of the suffering of humanity. I wish, therefore, at this time to emphasize as my specific subject

THE DUTY OF THE DENTIST.

1. *His Duties to Himself.*

Thoroughness of preparation is his first duty. He should be well educated. I do not intend to convey the idea that he should seek out the college that will put him through on shortest time or the one that will slip him through in the easiest way, and give him a "sheep-skin" regardless of what he knows. He should investigate the matter and ascertain what college gives the most thorough course and is the most rigid in its requirements; in other words, one that will not graduate a student unless he is deserving of his diploma. This applies alike to the Literary College, and to the Dental College. He should commence at the outset with the determination to use all the means within his reach to store his mind with knowledge that will fit him for his noble profession.

He should not think that when he receives his degree that his education is complete. For, indeed, it is not. He has just entered a life-time of study if he keeps up with his profession. In our profession, as everywhere, this age is calling for trained men. He should take the best journals, read them carefully, and write for them as he may acquire the ability to do so. If he knows anything good, let him

give it to the profession. He should take an active part in associations, and so use all means for first preparation for practical work and for constant growth in everything pertaining to the success in his profession. He should be thoroughly equipped with the very best instruments and material that can be had. I say get the best regardless of price. If he takes into consideration his success he cannot afford to count the cost of goods.

He should never do cheap work; always do good work; high priced work even if he gets a small sum for it. He should not allow himself to slight a case because he does not think he gets money enough for it. "If anything is worth doing at all it is worth doing well." If he undertakes a case let him turn it out first-class, otherwise he had better not touch it. He should cultivate a love for his work. "Love is genius," and if a man has proper love for his profession, he is a genius in that profession. He will not work as a hired man, simply with the view of getting the most money with the smallest amount of work, but he does it with great earnestness of heart, and he feels more proud of his achievements than he does of the money he receives. Such a one never fails to reach eminence in his profession.

2. *His Duties to the Public.*

He owes the public something. Let him remember this. He should be kind, patient, and generous. Let him learn to speak a kind word to every one. He should remember that the people are not all Dentists, and it is frequently necessary to explain things that seem very simple to himself, but are complicated to his patients. He should be faithful in his work. He should never perform a doubtful operation without first telling his patient that it is so. Patients place themselves in his hands believing him competent and honest, and he should never betray this trust. He should do or advise his patients to have done just what he would want under like circumstances. When called on

to perform operations that would be detrimental to his patient, let him state the case clearly and explain why it should not be done; then if they insist, kindly but positively refuse to do it. Dollars and cents are no consideration here. He should be personally neat, should provide a comfortable office, and be sure it is well kept. Make it as inviting as possible, for at best people enter the dental office and dental chairs with dread. Let him remember that neatness is of vital importance. Clean wash-bowl and clean towels and clean napkins are essential. He should pay especial attention to his glasses. Above all he must keep his nails and instruments and spittoon, and everything about his chair clean. He should keep his wash-bowl in operating room where his patients can see him wash his hands. These things may seem too little to mention, but some one has said that "trifles make perfection."

3. *His Duty to His Brother Dentists.*

I would not commend clanishness; quite otherwise. But there must be among us the form, and spirit, and power of brotherhood. Dentists living in the same community have established relations which should not be overlooked. Be careful never to say anything, directly or indirectly, to wound a brother's feelings, or to weaken the public's confidence in him. Be ready at all times to render him any assistance you can. We all have our troubles, and should ever be ready to sympathise with others. Speak kindly of him at all times. Should any of his patients fall into your hands, and complain of his treating them badly, never encourage them in their complaints. Remember, there are always two sides to every story. If you are sure they have been in the hands of an imposter, it is your duty to tell them so. Otherwise, professional relations demand that we speak no ill of the dentist. Don't believe all you hear of your brother dentist. Statements of patients are not always correct. Should you hear of a brother doing any unprofessional act, before you cut him off, approach him as

a brother, and get his statement of the case, which will often remove all unpleasantness. Be faithful to each other.

4. *His Duties to His Profession.*

He should bring no dishonor to it. He should make all his work and walk in life be such as will elevate the noble profession to which he has dedicated his life and talents. The men who have done most for their profession were men of noble traits of character, and acted nobly in all their relations of life.

Chapin A. Harris, a name that will live forever, Austin Bond, and a number of others, were men who devoted their lives to the work, not from any selfish motives, but from their earnest love of the profession, and for the good of the people. We should make dentistry a real good to mankind, and so honor our chosen profession. To do this, means a lifetime of real earnest labor. And, gentlemen, I know of no better field of labor than we have right here in this Association; and I am proud to say, though we have come far short of duty, we have done much already; there is a number of good workers who have not been idle. We have begun the work well—a strong foundation has been laid, and we have the material to carry up the building. Shall we stop here? There is no stopping place. If we attempt to rest on our oars the current will bear us down the stream. "Onward and upward" *must be our watchword.* This is a progressive age, and the moment we cease to go forward, we begin to go backward.

I hope every member of this Association will bear this in mind, and will elevate himself and his profession by putting forth his best efforts in this work. No State has a better class of dentists than Alabama; no State can have a better association than Alabama. All we need is to be aroused to a sense of duty. Bring out those who do not attend. There are a number of good men in our State who have never attended a meeting of this Association; they will make good workers if we can get them interested and

enlisted. How can we get them? Why, just go to work in good earnest to make this meeting interesting, and our next meeting far more interesting. Make an earnest effort to reach them, and when you meet them, tell what a good meeting we had, how much you enjoyed it, and with what pleasure you look forward to the next meeting. Get them to attend our next meeting, and make it so interesting and profitable that they will let nothing prevent their coming in future.

Gentlemen, the future of this organization rests on each member individually. Each one has his part of the work to do; no one can do it for you. You must all do something. Nothing can be accomplished without an effort. But there is great power in united effort; and if we all use our best efforts to get every dentist in the State to meet with us next year, I believe they will be here. If we will just take hold of this Association, and work for it with the same interest and zeal that we do our office affairs, take my word for it, we will have one of the best associations in the world. We will not only attract the dentists in our own State, but they will come from other States to attend our annual meetings. We want to work our Association up to the point where *every* dentist will feel that he cannot afford to miss it.

Gentlemen, the only thing that will do this is united effort. It *must* be done; let all of us determine it shall be done. As soon as you get your subjects, commence at once preparing your papers for next year; give them the proper amount of study and careful preparation. Then, at our next meeting, we will have papers to read, and be the better prepared to participate in the discussion of others, and each one will feel happier from having done his duty; and the results will astonish and gratify us. All the time and labor devoted to this work is given to ourselves, as well as to our fellow members, and to the profession. While of great value to the Association as a body, it is of far greater value to us individually.

The Executive Committee offered a report engaging Mrs. J. M. Walker ("Mrs. M. W. J.") to report the proceedings for the sum of $15.00, which she had agreed to accept for the work.

Dr. T. P. Whitby moved to amend by making it $25.00.

Dr. E. S. Chisholm said that he had never heard of the proceedings of a several day's meeting being reported for less than $50.00.

Dr. W. D. Dunlap thought that a lady ought certainly to receive the same compensation as a man, for the same work equally well done.

Dr. T. M. Allen said that the state of the treasury had been consulted before naming the sum to be paid.

A vote was taken, and the amendment making it $25.00 was carried.

Reports of Standing Committees were called for.

Dr. W. D. Dunlap, of Selma, chairman of the committee on Physiology and Etiology, read a paper entitled:

THE TEETH AS DERMAL APPENDAGES.

A strange and complicated piece of mechanism attracts our attention—a wierd and fantastic figure arises to our view. First, we see the frame work of the structure—ossific in character, and composed of many parts; hinged, double hinged, ball and socketed together—this is the frame of man. And upon this frame of bone, within and around are to be found various structures, skillfully combined to give motion to the whole machinery, and perpetuate its powers by this means. The uncouth outline of the frame is hidden. Longitudinal, horizontal, and striated layers of tissue are piled up one on another until a symmetrical figure is produced. The whole structure is covered with a garment that is modified in structure "to suit the demands of the various parts." Within this ossific frame and outlying integuments are found a number of cavities and canals – all designed for some useful purpose, but to us the oral cavity is the most interesting; it is guarded by integuments that

by muscular action close at will, and in it are the issues of life and death, through this cavity, in conjunction with the nasal openings the air is inhaled and exhaled by the lungs. Through this cavity food passes to the stomach, both fluid and solid, and within its walls a small but complete mill is found designed to reduce the solids to a condition fit to enter the organs of digestion.

The alimentary tract is an opening extending from mouth to anus through this net work of bone and tissue—interrupted here and there by valves, coils, convolutions, sphinctors, &c., and on this line—between entrance and exit—is located the stomach. This is the great reservoir through which properly prepared supplies are disseminated through the whole structure, while the residue is voided by its own outlet.

The mill is located at the upper or highest elevation of this tract, and demands educated, yea, skilled labor to keep it in good working order. To the end that this labor be properly performed it is necessary that a knowledge should be obtained of the origin and structure of the component parts thereof, and its dependence upon the rest of the system for support and maintenance of the integrity of its various parts. With this knowledge an attempt should be made to learn how best to maintain the physical relations necessary to preserve this little mill and keep it in good order.

It will be conceeded that perfect teeth in the mouth of a perfect being would need but little attention further than cleanliness. But the infirmities of humanity, both mental and physical, produce such changes in development and maintenance of integrity of structure, that the little mill gets out of order and needs repair. When such is the case the services of a skilled millwright is needed. The repairs being thoroughly made, instructions should be given the miller that will enable him to use preventives with success. But in this field there is yet much to learn, and it may be, much to unlearn. This we know, that often the

best efforts to keep the teeth in good order prove failures; that hygenic rules and operative skill alike fail; that there are causes at work to bring about these failures; that we do not understand, and our hope is that present and future investigations will so reveal these causes; that the proper remedies may be successfully applied.

In this paper our design is to call your attention to the intimate relation that exists between the teeth and the skin, and ask that present and future attention to the subject that will enable us to determine whether pathologic conditions of the skin materially effect the teeth, and in what way.

Neligan says the skin which covers the entire external surface of the body has many uses in the animal economy; and therefore a diseased condition of it is attended not alone with vast inconvenience to the person affected, but is also usually accompanied by a greater or less amount of derangement of the health generally. It is the organ (or medium) of touch, serves for the defense of the muscles, bones, blood vessels and nerves, placed beneath, is moreover the organ of absroption and excretion, and * * * agrees in many of its functions and properties with the mucous membrane, of which it is manifestly a continuation. The mucous membrane protecting the internal parts of the body, while the skin protects the external. In derranged conditions of the skin, the mucous membrane becomes more or less engaged, and in diseases which affect the mucous membrane, the functions of the skin as regards absorption and excretion are also affected to a greater or less degree.

A. R. Robinson, M. D., speaking of hereditary syphilis, says: Lesions of the skin usually appear; the teeth may be dwarfed or undeveloped, or easily decay as the result of syphilis, either deciduous or permanent teeth may suffer much in their nutrition and development.

Tomes says: The mucous membrane which lines the alementary canal is continuous with—is indeed a part of the external skin, with which it blends at the lips, and that the teeth are dermal appendages.

Carpenter does not include them in his enumeration of skin appendages, but he uses the language quoting from other authors :

"The teeth are developed from the mucous membrane covering the edges of the maxllary arches. The mucous membrane covering the edge of the jaw presents a semicircular depression or grove ; this is the primitive dental groove (of goodsir) from the floor of which the germs of the deciduous teeth are developed, the germ of each tooth is formed by a conical elevation or papellae of mucous membrane which constitutes the rudimentary pulp of a milk tooth. The dental groove now becomes contracted, its margins thickened and prominent, and the groove is converted into follicles for the reception of the papillae by the growth of septa which pass across the groove between its borders ; the follicles by this means become the alveoli lined by pereosteum, from the bottom of which the process of the mucous membrane of the gum rises, which is the germ of the future tooth ; these changes constitute the second or follicular stage."

The papillae now begin to grow rapidly, project from the follicles, and assume a form corresponding with that of the future teeth. The follicle soon becomes deeper, and from their margins small membranous processes or opercula are developed, which meeting, unite and form a lid to the new closed cavity. These processes correspond in shape to the crown of the tooth, and in number to the tubercles on its surface. The follicles of the incisor teeth have two opercula, the canines three, and the molars from four to five each. The follicles are thus converted into dental sacs, and the contained papillae become pulps. The lips of the dental groove gradually advance over the follicles from behind forwards, and uniting gradually obliterate it. This completes the third (3) or saccular stage."

Much of the description of the development of the teeth is here omitted, and we will proceed to quote further.

As soon as the dental sacs are formed by the closing of the follicles they gradually enlarge, as well as their contained

papillae, each sac consists of two layers, an internal highly vascular layer lined by epithelium, and an external areola fibrous membrane, analogous to the corium of the mucous membrane.

The dental pulps soon become moulded to the form of the future teeth, and are adherent by their bases to the bottom of the dental sacs.

Now a thin lamina or cap of dentine is formed on the most prominent point of the pulp; these lamina grow at the expense of the pulp substance, increasing in breadth and thickness.

The separate cones (if a molar tooth) ultimately coalesce, and the crown is completely formed. The pulp now becomes constricted so as to form the cervix or neck, and the remaining portion becomes elongated to form the fang.

The growth of the dentine takes place from the surface to the interior until nothing but the small pulp cavity remains in the centre of the tooth—communicating by the aperture left at the point of each fang with the dental vessels and nerves.

As soon as the formation of dentine has commenced, there is developed from the inner wall of the dental sac, a soft pulpy mass, the enamel organ,—which is ultimately united to the surface of the dental pulp as its cap of dentine. It consists of a mesh of fibres, elastic and spongy, containing within its reticulaticus, fluid albumen; and at the point of junction of each fibre, a transparent nucleus is visible. The surface toward the dentinal pulp is covered by a layer of elongated nucleated cells. *The enamel membrane.* The deposition of the enamel takes place on the outer surface of the cap of dentine. The cementum appears to be formed at a later period of life by the periodental membrane extending from the margin of the enamel downward.

Eruption. When the calcification of the different tissues of the tooth is sufficiently advanced to enable it to bear the pressure to which it will be afterwards subjected, its eruption takes place, the tooth making its way through the gum.

The gum is absorbed by the pressure of the crown of the tooth against it, which is itself pressed up by the increasing size of the fangs. At the same time the septa between the dental sacs, at first fibrous in structure, ossify, and constitute the alveoli, there firmly embracing the necks of the teeth, and afford them a solid basis for support."

I have deemed it best to quote thus largely, that we may comprehend the idea of the author, and while the evidence may not be conclusive, there are many indications that this author should have included the teeth in the list enumerated as skin appendages, as Simes and others have done.

Comparative anatomy sustains the theory, so does the loss of the teeth with the disappearance of the olveoli—through disease or old age—leaving the parts ultimately in the condition they were found when the dental groove first became perceptible, the groove even being present in many cases, and the gum as perfect as the skin is found when a scale is thrown off. If these things be so, may we not reasonably look to the skin, as the immediate, or incidental instrument through which the teeth are not only formed but nourished, and that whatever tends to impair the functions of the skin, may prove deleterious to the teeth also. This too would seem to be true from what knowledge we have of eruptive diseases, and their effects upon the teeth, whether they originate in the Derma, or elsewhere. 'Tis true that results of defective nutrition may be witnessed in all the tissues, and organs of the body, even at one time and then the skin shares with them in this loss of nourishment, but I imagine that the skin is primarily responsible for withdrawing the supplies needed by the teeth, as evidenced in what are termed skin diseases and in our efforts to establish this relation between skin and teeth, we would not ignore the relation sustained by the blood vessels in the pulp cavity to the interior of the tooth, but would rather confine our present investigation to the source of external supplies, to the part of the structure with which we have most to do—provided the work is done in time. We might mention a num-

ber of pathologic conditions of the teeth that point to the skin as the origin of the disturbance, and on the other hand, certain disturbances of the skin indicate to some extent that the teeth are defective. Who would expect to find a scrofulus subject with any but chalky and badly dissolving teeth, should the victim escape, the offspring will surely not escape. So too with syphilitic taints as manifes ed upon the skin.

I simply desire to call your attention to this subject, deeming the relations between the skin and teeth well worth a more careful investigation than has been given the subject in the past.

Which, on motion, was accepted.

There being no other papers from the committee, the subject of the paper was declared open to discussion.

Dr. Morgan spoke of the specific marks of syphilitic poison on the teeth. He had seen some very marked cases where the hereditary taint had taken that special form. There was a great deficiency of earthy matter in the dentine, which was lacking in solidity of organization; whether or not due to insufficient quantity of limesalts, was not prepared to say. In one case he had in his mind the pulp chambers and nerve canals were abnormally large, and the dentine very soft—not possible to cap such a nerve and save it; success was doubtful even after devitalization; there were scrofulous indications, the result of the syphilitic conditions. A dead tooth, even under the best conditions, had but poor chances, and would soon be lost after a very few years at most. In this case the foramen was broad open like a funnel. He would deferentiate between syphilis and scrofula, though perhaps all scrofula had its origin in syphilitic taint. Usually in scrofulous diathesis, there was a softened condition of the tissues; if the individual escapes, his progeny will bear the marks. In hereditery transmission, one or two generations may be passed over, but it will re-appear sooner or later. Though the teeth are pearly in appearance they do not break down as readily as was thought.

It is a beautiful type of teeth, to the eye, and if Pyorrhea Alveolasis is missed, the teeth are retained better than the average. They succumb readily, however, after the development of pulmonary symptons. In another form when the glands are involved we find the enamel softened, and the dentine breaks down readily; the gums are often inflamed with a fetid discharge. The negroes, when fed about the house, very rarely have sound teeth at maturity. When devitalized and filled they rarely last more than four or five years. In a course of close observation, during a long lifetime, had found but two negroes, twenty-one years of age, with sound teeth. The teeth would be in apparently pretty good condition, but the great majority have small approximal cavities; the character of the teeth is of the scroufulous type, with the glands involved; this is especially true of mulattoes.

The paper stated that the "cementum began at the margin of the enamel." This is not strictly correct; the cementum laps over on the enamel and covers part of it; an examination of every tooth will show this.

A written paper should be very exact. He would correct Carpenter if Carpenter was wrong. The extent of overlaps varies and has a chamfered edge. Is satisfied that the teeth are marked by sympathetic diseases of the skin, especially when the teeth are in the formative stage, dentification is interrupted. This is seen from scarlet fever, measles, and probably small pox, but have not investigated the latter. When the teeth are marked, it can nearly always be traced to a period corresponding with certain eruptive diseases. Unfortunately for them, the teeth suffer similarly to the other desmoid structures and appendages; the latter may recover but the teeth never do. If there is imperfect crystalization of the enamel it is never obliterated; the enamel never recuperates. An abscess of the dicidous tooth, may through inflammation of the membranes injure and mark the paramount tooth. The vitality of the bicuspid may be destroyed by pus from a deciduous molar; had in one in-

stance, removed the crown of a first bicuspid, at six years of age.

Dr. Geo. Eubank asked Dr. Morgan if he had ever seen Nasmyth's Membrane?

Dr. Morgan replied that he had not; that he was not a practical microscopist. If not removed by friction, however, it might remain permanently, as it was composed of fluoride of calcium and was the hardest substance in the human body. It had the appearance of hardened epithelian scales. Job knew what he was talking about when he spoke of the "skin of the teeth."

Dr. Eubanks said that he had seen the membrane on a bicuspid of a child fifteen years old.

Dr Chisholm said that he had often traced affections of the teeth back clearly to severe cutaneous disease at a certain age, all of the teeth which were at the same stage being similarly marked.

Dr. Walker considered it doubtful about all manifestations of scrofula having their origin in the syphilitic taint. He considered that a great deal of scrofula originated in the use of hog products, the very name itself being derived from scrofa *a sow.*

That an entire change of diet in this regard, would often produce a marked change, giving long years of good health.

Dr. Morgan said that statistics would hardly bear out this idea; that the Southern people, who are large consumers of hog-products have less scrofulous affections than the English who use beef and mutton almost exclusively.

In Massachuetts 48 out of every 100 deaths are due to scrofula or consumption; in Pennsylvania 33 in 100; in Tennessee 13 or 14; in Florida only one in 100 among natives.

Dr. Walker said that such statistics were compiled from mercantile sources. There is perhaps less of that class of diseases in New England than in the South, which depends upon Chicago and Cincinnati for meat. In New England nearly every man raises his own meat, and kills his own hogs for a supply of meat.

Climate, and surroundings and habits of life have much to do with these things. In Portland, Maine, at the meeting of the A. A. A. S., the meetings were held in elegant halls, but of an eager, earnest audience two-thirds were asleep—not because of lassitude, or of indifference, but the same air in the hall had been shut up until it had rotted and fermented. The style of building, and of living in closed up, unventilated houses, has much to do with the health record.

Dr. Morgan: It is very true that their rooms are very small, and their fires very large.

Dr. Walker: And this intensifies the effect of their hog diet.

In the South we live much in the open air, and throw off the poisonous effects. There the hominy and corn-bread eaten with the bacon, etc., not a puritive neutralizing effect.

On motion the subject was passed.

Dr. T. M. Allen, of Eufaula, Chairman of the Committee on Mechanical Denistry, read a paper entitled:

MECHANICAL DENTISTRY.

Mechanical Dentistry is a very important branch of our profession, though very little attention is paid to it.

This branch of our profession seems to have almost become one of the lost arts, and especially is this true outside of the large cities. It is a very rare thing that we meet with a dentist that makes any other than a rubber or celluloid plate, and the majority do not even know how to make one of celluloid.

It is really refreshing to meet one that can make a gold plate, and continuous gum work is unknown and almost unheard of among the masses.

Why is it that we see so little metalic work; is it because rubber and other materials of that class is better than metal or continuous gum. I think not, but because it is easier worked and cleaner and cheaper. How many dentists of to-day can make a gold plate, and why? Is it because the

people will not have them. No! But because the dentist can not make them.

Some say that vulcanite and celluloid has been a blessing to the public. This may be sc, but it has been an injury to the profession and has retarded rather than assisted the advancement of mechanical dentistry.

How many of the cheap John's and quacks, that are now trying to practice dentistry, would be at it, if they had to go to the Laboratory, melt, roll and swage the gold to make plates out of and use the mouth blow pipe, as was done twenty-five or thirty years ago. Not one in twenty that are practicing to-day would have ever attempted to practice denistry.

I will only mention two styles of plates that I have been very successful with where other kinds were failures. First, what is known as the "Roofless plate." With this plate I have been able to make a fit in very soft and spongy mouths, and also where there were hard lumps in the roof of the mouth, where the ordinary plates would rock, and it is almost impossible to make them fit.

Parties who can not bear for anything to cover the roof of their mouth or touch the palate, can wear one of this style with ease and comfort.

This plate is made without covering the roof of the mouth at all. This specimen will give you a better idea of how it is made, than any description I can give you. It fits better, adhears more firmly, and is steadier than the old style, lighter and equally as strong, and gives better satisfaction, and does not rock in chewing.

The other is combination, cast metal and rubber or celluloid combined, and is used principally for lower dentures, and where weight is desired as is often the case. You can make it all of metal, as you would of rubber.

We all have more or less trouble with lower plates, and I have been more successful with the cast metal plate than with any other method. After taking the impression and making the cast as for rubber work, I wax up the base

plate minus the teeth to the desired thickness and shape as I would my metalic base, building up a rim around the edges with a duftail groove all around for the rubber to run into to hold the teeth on. After shaping wax as desired, I flask in one of Weston's or Watt's flasks, as though the teeth were in place; after removing wax, I close and dry out the flasks thoroughly; having cut my gates for pouring metal I melt and cast plate while flask is hot; when cold, I open flask and dress up the plate, try in the mouth, and if fits all right, I set up teeth and articulate, and invest, pack and vulcanize as you would an ordinary rubber plate. This metalic cast base plate will show you better how it is done than I can describe it, and you will have a good fit, (if you had a correct impression), and it will give perfect satisfaction. The plate is strong, neat and cleanly. It takes a little more time and costs a little more than rubbers, but it is better, fits better and gives better satisfaction, and we can get a better price for it.

The advantages of this metalic base over rubber are that in casting the plate you do not wear nor break down your cast by pressure as in rubber work, and you get a perfect counterpart of the impression, and where weight is desired you can cast plate solid, attaching teeth with the metal instead of rubber or celluloid.

It is also a good conductor of heat and cold, and does not inflame the gums and surrounding tissues like rubber does.

On motion, the paper was received.

There being no other papers from the committee, the subject was declared open for discussion.

Dr. Dunlap asked what the chances would be of getting one-tenth of the plate-work now done, if it was to be gold work at gold rates. When $300.00 was the price of a set of teeth, there were not many sets made. Rubber and celuloid work was easy work for the operator, and easy for the patient to keep clean. It was easy to make a perfect fit with rubber, while with gold work the best operators sometimes had to *crimp the edges* to secure a fit.

Dr. Morgan asked what was being done in bridge-work by Alabama dentists?

Dr. Dunlap said he had made one piece, of two teeth, but one of the teeth breaking off, he had never been able to get the piece out of the mouth for repairs.

Dr. Walker, of New Orleans, said he wished to offer one criticism on the paper read, and that was in regard to placing rubber and celluloid on a par, as being about one and the same thing for the operator or for the patient. He had been a gold-worker for many years. When rubber work was introduced, he had at once recognized its superior advantages with regard to cleanliness, in affording no space for the retention of debris. He had accordingly adopted rubber, and used it until convinced of the deleterious nature of its ingredients. He had then discarded it entirely, not having made a rubber plate for fifteen years. Celluloid offers even superior advantages to rubber in being sweet and clean, and in facilities for the artistic restoration of facial expression. It has the advantage even over continuous gum, in being very light. If men will make themselves as proficient, skilled workers in celluloid as they were in gold, they will find it a clean, substantial, durable, artistic substitute for all other materials.

Dr. G. M. Rousseau asked Dr. Walker if there were any special points in working celluloid?

Dr. Walker replied that one of the main points was to have the plaster cast hard enough not to yield, in order to get an exact fit. In this respect it was more difficult than rubber Another essential point was to season it properly with very low heat, after pressing into shape, cooling off very gradually. If finished up at once, it was liable to shrink and get out of shape. He could give no precise rule as to the seasoning. It was a matter of individual experience and judgment, guided by the length of time it was subjected to heat while pressing. If properly seasoned, nearly all the camphor would be evaporated; it would retain its color, and be hard and firm. He uses Hunt's Dry-

heat apparatus, which has but one disadvantage; having but one screw, it is necessary to move the flask, bringing the different parts of the piece under pressure when it fails to give evenly. The apparatus consists of a kettle of brass one-fourth of an inch thick. The flask is held in a brass stirrup, and is readily lifted out for examination at intervals while pressing. It is well adapted for controlling the heat while seasoning.

Dr. Eubank related an incident showing the deficiency, in practical details, in college education. A recent graduate had not long ago brought him a celluloid plate for repairs. He had cut his dove tails, as for rubber repairs, but finding it "very brittle and the reddest rubber he had ever seen," he had brought it to exhibit as a curious specimen of rubber—not aware that it was celluloid, never having handled the latter material. He had his diploma, nevertheless.

Dr. Dunlap, jestingly, said that he was surprised to hear any dentist recommend celluloid, when it was well known that it would burn up, or even explode. He had been told of a lady whose celluloid plate exploded when within four feet of a gas jet.

Dr. Eubanks considered celluloid the best material for use in many cases. He had the New Mode Heater. Knew of plates that he made five years ago which still retain their perfect fit and color.

Dr. Coyle said of bridgework that, like every other kind of work, intelligent application was requisite to success. Much also depended upon conditions, the manner of insertion, and the points of attachment. He did not favor very long pieces of bridgework. Attachments to divitalized teeth, where the peridentium had once been the seat of inflammation, could not be depended upon; but where bridgework was properly made and skillfully applied, under proper conditions, nothing else could so exactly meet the requirements of certain cases. He himself had been very strongly prejudiced against it by instances of mal-practice which had fallen under his observation—pieces which had

been made for the dollars in them—whole dentures attached to diseased roots, etc. Such practice could not be defended. He had an illustration of bridgework properly done and properly inserted in his own mouth, for which he challenged criticism. Bridgework should never be attached to any but perfectly healthy teeth. Pulpless teeth, when the peridental membrane had once been the seat of inflammation, were liable to an acute attack at any time. There was a stage of rest, but there was no telling how long it would last. There was always the liability of the loss of the points of support. With proper adjustment, with a gold collar without any superabundance of ox-phosphate, and with proper articulation, there was every promise of success. His own personal experience was eminently satisfactory. Partial plates always a lateral motion, or a rubbing up and down, causing the loss of the adjacent teeth. The clasp was also very objectionable; but now it had been proved feasible and practicable to restore lost teeth without plates. He had worn his own piece for a year and a half. He was scarcely conscious that it was in his mouth.

Dr. Morgan said that he had never looked upon rubber with the horror expressed by some of his friends. It was true that we could not get $250 for a set, but we got so many more sets to make, that it was satisfactory compensation. He knew of a full set that had been worn for twenty-three years, with perfect satisfaction, and was then broken by the servant letting it fall upon the floor. Did not believe that it caused any disease in the mouth. It was true there were diseased mouths under rubber plates, but the same was true of all other plates, even gold, silver or platinum. Not so frequently perhaps, but quite as severe.

Dr. Dunlap found it even more frequent under silver plates, especially the red patches.

Dr. Morgan said that the method of lining rubber plates with what was known as vulcanizable gold obviated all the trouble attributed to the rubber while retaining the advantages of cleanliness, perfect fit, etc. The gold is put on

the cast, and after the piece is vulcanized it adheres with great tenacity, and can not be removed by ordinary means. It takes a fine polish with brush and pumice; a "gold plate" as far as the upper surface is concerned. It obviates all the trouble caused by rubber plates which is caused by roughness of surface; thorough polishing will usually cure the disease. Considers that rubber has been a blessing to thousands of people, who would otherwise have "gummed it" to the end of life. One of the worst diseased mouths he had ever seen was under a gold plate, and the disease was cured by imbedding the gold plate in the rubber, which was then worn till death. He considered that celluloid answered a very good purpose for temporary plates, but that it would not answer for permanent work, except in isolated cases; but few peices were worn two years; had known one peice worn nine years, but only one other worn two years without deterioration; the large majority deteriorate within a year. The teeth get loose and the plates get very filthy. There are mouths, however, where the secretions do not affect the material. It makes very beautiful work when made on metallic dies, the hardest portion being the surface. When put up on the Stuck plan, they do not need any polishing. Celluloid can be fashioned with more artistic skill than any other material except continuous gum; but an ordinary operator can not do that, and a man who is capable of making continuous gum will not do it; he will not have time to do much of anything else. To succeed with continuous gum work, is to be confined exclusively to that; otherwise it takes too much time to learn. He did not think there was one man in the South using it; it was considered out of date.

Dr. Walker asked if the plates refered to by Dr. Morgan as failures were seasoned plates?

Dr. Morgan replied that the only seasoning he did was while the machine was cooling.

Dr. Walker said that if it was left in, with a low heat, from one to two hours, he would be more likely to succeed with celluloid.

Dr. Morgan said that knowing Dr. Walker's capacity for accurate observation he was willing to accept his views, and would give it a test. That the rubber being a non-conductor had nothing to do with the trouble. The temperature of the mouth was always the same, unless there was inflammation. All who have experimented know that black rubber, though equally a non-conductor, is more compatible with the membranes. There is undoubtedly something in red rubber which is incompatible; even lining a red rubber plate with black rubber obviates the trouble, whatever it is.

Dr. S. G. Robertson asked if Dr. Morgan had had any personal experience with the vulcanizable gold?

Dr. Morgan replied that he had; that it was pure gold, with some foreign material; he was not at liberty to give away the secret of its preparation, but ordinary gold would not vulcanize.

Dr. S. G. Robertson said that he differed with Dr. Morgan as to rubber not being heating. It was a very low conductor and does heat the mouth; knows it for a certainty, and more so under the most perfect fitting plate. He had had a case where there was a mass of white suppurating ulcers under the plate. After treating one mouth he had inserted a plate lined with vulcanized gold. After wearing for six weeks the patient, who was a physician, called to say what perfect satisfaction it gave. All irritation had disappeared, though there had been tiger-lily ulcers all over the hard palate. Rubber closes up the surface and causes heat and inflammation. He did not think anything would ever surpass rubber lined with gold. Would like to have Dr. Morgan give a theory to cover the case described; the tighter the fit, the more heat and inflammation; the looser the plate, the less the disease.

Dr. Walker said that he wished to give credit where it belonged; that he owed his method of reasoning celluloid to Dr. Finley Hurt, of Washington City.

Dr. Morgan said the case mentioned by Dr. Robertson was easily explained—the gold offered a polished surface;

the roughness of the rubber causing the inflammation. There was always heat where there was inflammation, but there was no abnormal heat under a rubber, or any other plate without inflammation; that the mucous membrane was an hot eliminator of heat; there was the same degree of animal heat in the mouth as everywhere else. When anything was hotter than the surrounding atmosphere it would eliminate heat; when it was colder it would absorb heat, maintaining an equilibrium with want of harmony there was irritation. Inflammation sets up increased heat, but not by reason of a non-conductor. It is not possible to have any greater degree of heat in the mouth than in other portions of the body. In all cases where irritation is created, inflammation is set up, and then there is abnormal heat.

Dr. Dunlap said that just as the feet get too hot from tight boots so the mouth gets hot from a too closely fitting plate.

On motion, the paper, and the subject was passed.

Incidents of office practice was made the order of business for the next session.

On motion adjourned to 8 p. m.

SECOND DAY.—Night Session.

Wednesday, April 14th.

Meeting held in Reading Room of the Exchange Hotel. Called to order at 8 p. m.

Dr. H. D. Boyd, of Troy, First Vice President, in the chair.

On motion the subject under discussion at the last session was re-opened.

Dr. Morgan wished to reiterate his statement that the non-conducting properties of rubber had nothing to do with the troubles occasioned by its use. Neither the rubber nor

the membranes can generate heat, though the denture may retain heat. If a man has two coats of the some weight, but one made of wool and the other of flax, the woolen coat will help the body to retain its animal heat, and therefore the coat appears to be warmer. In the uncovered mouth the atmosphere passing back and forth serves to remove animal heat, which is necessary to a healthy mouth. Under a closely fitting rubber plate the heat is all retained, which is one cause of the deleterious effects of rubber.

Dr. Walker said that when he abandoned the use of rubber, fifteen years ago, and his pronounced opinion became known, he had been very much maligned; it was even said that his opposition was based solely on the license question, but the fact that he threw away a rubber-practice of more than $1000.00 a year and gratuitously replaced all of his rubber plates that he could call in by extensive advertising, was sufficient answer to that accusation. The rubber manufacturers continue to send him samples with request to test, etc.

During the World's Exposition, one of the most prominent manufacturers being in New Orleans, he called to see him. He expressed his willingness to try his rubber if he could guarantee it to possess none of the bad qualities which he was willing to admit. The gentleman said that the proof that it was really a pure, good article, was guaranteed in the fact that his own wife was wearing it. He went to his wife's room and brought the plate for examination.

He, (Dr. Walker) replied that it was the mouth he needed to see, to judge of the effects of the rubber. This, also, was permitted, and the mouth was found to present all the peculiarities of pronounced rubber disease.

The gentleman now admits that there are some persons with constitutional idiosyncracies who cannot tolerate rubber. Unfortunately this is the case with the very large majority of patients; nine-tenths suffer from its effects if the truth was known. For his own part he was satisfied to

let it severely alone. He said that there was a very clear distinction between the effects produced by filthy plates, or by rough, badly made, ill-fitting plates, and the effects of red rubber. He had seen the very worst cases of disease under the most perfect plates, the most thoroughly well vulcanized and with the most scrupulous cleanliness.

Dr. Morgan did not think that one plate in twenty-five was ever left perfectly clean—that mere washing with soap and water would not clean a rubber plate, it required a stronger alkali, as ammonia, etc. The normal temperature of the mouth is 98°. When lower the fires require stirring up; when above, they require slacking off, as by consuming less carbonaceous food. The heat of the body is retained by the use of non-conducting clothing, as of wool, in winter, and thrown off by wearing linen or silk in summer, but there was no provision for such changes in the mouth. The temperature of the body could be raised by a hot bath, but it was rapidly equalized all through the body. When rubber plates creates irritation there is a contraction of the capillary vessels, with staris, the corpuscles finding their way over through the walls of the parts.

Dr. H. D. Boyd said that he saw little difference in the distinction.

Dr. Morgan said that the parts were diseased.

Dr. Walker: That it was the result of mercurial poison, with the same practical result, admitted in both cases, viz: Heat and inflammation.

Dr. E. H. Lock, of Troy, said that he was trying the vulcanized gold—could not say what the final result would be, but the mouth looked healthy after two or three month's use of the plates.

Prof. Coyle said that the subject of pulpless teeth had afforded more food for discussion and furnished more articles in the journals, than any other one subject before the profession in modern times. He wished to call attention to one point; that in efforts for the preservation of that class of teeth, the distinction was not made sufficiently

clear between *pulpless* and *nicrossed or dead teeth*; that all were treated under the general name of dead teeth; that not all pulpless teeth were dead teeth; that where the attachments to the alveolus were intact there was still a means of nutrition, supplying the elements of tooth substance. The death of one portion of the tooth did not necessarily involve the death of the entire tooth. Where a tooth is devitalized through exposure, or by mechanical injury to the pulp, the latter came under the dominion of chemical forces; there was a septic condition of the pulp-tissue and retrograde action.

With the investing membrane in good condition, the tooth could be treated with antiseptics in different ways and with different methods, until it was restored to a septic condition, and the root canals filled.

All single rooted teeth could be filled in one way; molar roots differently. From a broken-up, aseptic condition the tooth could be restored to health and years of usefulness. The investing membrane of this tooth, covering the cement of the fang—the only connecting link between this tooth and the vital economy, was still liable to disease. *Taking cold*, acute inflammation may supervene, going through all the stages of a forming abscess.

But take a tooth which is not in aseptic condition, are devitalized by arsenic, for instance, and pursue the same methods all through, and after a time a like fire will be lighted up in the alveolis, with the same result. This would be referred by one to arsenic penetrating the dentine to the cementum; by another to the mechanical injury, as a broach through the foramen.

In place of the broaches on the market Prof. Coyle preferred a cambric needle with the temper drawn, and a little hook bent at the end.

Passing this to the apicial foramen and bending it over, gives the exact length of the root canal. In preparing a fang for filling, he would remove the larger portion of the dentine, leaving only the cementum, which is nourished by the peridental membrane, and is not influenced by the absence of the pulp. Fills straight canals with an orange

wood peg, trimmed to fit the canal, after the dentine is removed, as a final dressing, pumping in with cotton, a mixture of eucalyptus oil, one ounce and one drachm, iodoform the most penetrating disinfectant for that locality.

Notch the orange wood peg and break it off, sending it home with a blow, filling around with base plate gutta percha dissolved in chloroform.

If septic conditions had existed, dip the peg in a preparation of equal parts of "gum camphor, hydrate chloral and chrystals of carbolic acid.

Where there are septic conditions and the patient cannot return for treatment, it becomes necessary to perform a radical operation at one sitting.

Until quite recently it was difficult to know exactly how far to go in enlarging the root canal. There was liability of coming out into the alveolus, and pumping through, producing necrossis and exfoliation.

The safe-sided drills now obviate that difficulty. If, however, the foramen should be penetrated, and fresh blood follow, apply the iodoform and eucalyptus mixture, and fill at once. If the patient returns in two or three hours open through the alveolus from the outside.

There is a clear distinction in the treatment, and diagnosis of dead or pulpless teeth, or necrosed fang with the periosteum separated or denuded. Whenever there is looseness, necrosis is to be suspected. If attached only at the extreme end of the root, all treatment will result in naught. It may remain quiet awhile but trouble will ensue. To insure success, first drill open and fill at once; then with spear-shaped drill penetrate the alveolus till the root of the tooth is touched; lower the hand till the end of the root is found, then burr off a portion of the end of the root; treat with iodine either alone or with creasote, or using a tent of floss silk, so adjusted as to be easily removed, and the cure is complete. All will be well if the necrosed point is removed.

Has had marked success in replanting teeth. Extract the tooth, cut off the end of the fang, fill the root and

crown; then with a separating file cut a groove lengthwise from the enamel down, for the escape of serum from the socket. The tooth will be sore and painful if this is not done—ligate if necessary to protect from injury, but this is often not needed. The old methods of medication with carbolic acid or creasote would often set up inflamation. This is not the case with the remedies indicated. Tincture of aconite is valuable to prevent any tendency to inflamation. Aconite allays irritation. Creasote or carbolic acid may be used as the last final treatment, to regulate the albumen of the tooth and prevent discoloration.

Dr. Dunlap inquired if it was not essential that the sac be removed?

Dr. Coyle replied that he never looked for it. He had never known it to give trouble.

Dr. Dunlap thought that if torn wide open it would be all right, but that if left behind it might cause trouble.

Prof. Coyle said it would waste and dry up when torn from the tooth, having no source of supply; that it was atrophied and would be absorbed.

Dr. Dunlap though there was still liability of abscess after replantation of pulpless teeth.

Prof. Coyle said that a tooth should never be replanted while the abscess was in a formation stage—wait until well. If the alveolus necrosed replantation could not be attempted. The alveolus must be perfectly healthy.

He did not recommend the extraction of pulpless teeth unless it was the only chance, and must always be governed by general conditions. Looseness of the tooth would indicate that there was not much attachment of the membrane. In that case, it would be necessary, if necrose, to open from the outside and remove the apex of the root. In subsequent removal of a replanted tooth, for the insertion of a plate had found it the firmest tooth in the jaw.

Dr. G. M. Rousseau said he did not see how the orange wood peg could be trimmed so as to fit the canal. It was not possible to measure the breadth or the circumference.

He treated with iodoform and filled with gutta percha, rolling it with a spatula, cutting off and forcing down with pliers; then push it down with a Donaldson's brittle point heated. He had never known of failures though others may perhaps have found them. He had known of a case when the wooden peg had been driven down and through and out, and removed from under the tongue.

Dr. Geo. Eubanks, of Birmingham, said he had removed a good many dead teeth, coming from other dentists, and probably failed himself; that patients would not submit to treatment with acute abscess. Most dead teeth were filled with the plastics, not with gold. Filled the roots with creasote and cotton.

Dr. R. B. Chapman inquired if he cleaned out the root canal and filled immediately, treating the abscess afterwards?

Dr. Rousseau replied that he treated and healed first.

Dr. Geo. Eubanks inquired how to remove a gutta percha filling if an abscess supervened?

Dr. Rousseau said he would have an instrument and introduce it into the gutta percha, thus removing easily.

Prof. Coyle said the abscess should be prevented; then it would not have to be treated.

Dr. Walker said that some one had said there was no way of getting the measure of the root canal. With a few fibers of cotton wrapped on fine Swiss broach alternating with little pieces of parafine he found he got an exact model of the root canal cavity. He, however, did not pretend to fill the canal solidly with wood. He filled it as full as he could with chlor-percha; then the peg driven in spread it into all the crevices and made a perfect filling.

Dr. Rousseau asked how that would answer if the fang was crooked, and the canal small?

Dr. Walker replied that in that case the chlor-percha alone would be sufficient; that what he had said had reference to large, open canals.

Dr. Morgan thought that Dr. Coyle had said what he probably did not mean when he spoke of treating pulpless

teeth—teeth which were *dead* all except the cementum—and making these dead teeth healthy; that where the crown and dentine were dead, the tooth could not be considered healthy.

Dr. Coyle replied that he had only used the word healthy in its general sense.

Dr. Morgan said that a teacher should be very exact; that he had also probably meant peridental membrane when he said tooth.

Dr. Coyle replied that the peridental membrane was always understood in speaking of "the treatment of a tooth;" that it was the surrounding parts which were under treatment.

Dr. Morgan asked Dr. Coyle why he wanted disinfectants in a pulpless tooth?

Dr. Coyle—If a septic, they are needed to restore to septic conditions.

Dr. Morgan—Antiseptic is one thing, disinfectant is another; the latter destroys the products of decomposition; antiseptics prevent their production. Carbolic acid does not disinfect; it is an antiseptic. In teaching boys, every word should be exact and correct.

Dr. T. M. Allen—Especially here, when we are taking down every word that is said.

Prof. Coyle admitted the *lapsus linguæ*, but claimed that it was a mere play upon words.

Dr. Morgan said that antiseptic and disinfectant were widely different terms. It had been said that iodoform was both, which could not be. He was on the safe side when he spoke of using the safe-sided drills to enlarge the canals. The tooth is in the worst possible condition for filling when the tubuli are full of semi-fluid matters. It should be well cut out with the drill, the dentimal tubuli and contents all removed. The treatment given for devitalized, pulpless, necrosed teeth was correct. There was as much soft material in the tubuli as in the entire pulp, in a semi-fluid condition. Both germicides and antiseptics should be em-

ployed; some preferring one, some another. He himself preferred carbolic acid.. Discoloration of a pulpless tooth was due to the decomposition of the semi-fluid contents of the tubuli. If the albumen is thoroughly carbolated, there will be no decomposition or discoloration. If filled at once, it will want to be removed in less than a month. The nose will tell the story of putrifaction in the tubuli. No man has sufficient skill to fill the natural canals of the roots of canines or incisors with wood and fill thoroughly; there are no means of preparing any solid material so as to fill it entirely without very much cutting out the canal. Success is due to cutting away the dentine. Teeth of which he filled the roots thirty years ago, are still in good condition. He enlarged the canal with a cone-shaped drill, and filled with a gold screw cut to correspond with the drill. There was no special choice of material, provided that the opacal foramen was well closed, and good margins made. He recalled a case filled in 1852 or 1853—a young man of strumous habit, of consumptive family The pulps died when he was sixteen years old. At the age of seventeen, the teeth were filled, and are still good. He had now in charge a patient, blonde, with sandy hair, of a family in which three out of every six died with consumption. The lateral incisors had been devitalized with arsenic, and were now very dark. Arsenic is a powerful antiseptic, used in Mexico to preserve hides.

Prof. Coyle thanked Dr. Morgan for his criticisms; he expected friendly criticism, and took it, as it was of course meant, kindly. There would be no progress under "boss rule." Different gentlemen used different methods, and we ought to discuss them all, in hopes of learning something new. As to the distinction between disinfectants and antiseptics—the latter destroy the germs which produce putrifaction; the former unite with the products of putrifaction, and destroy odors. With very few exceptions, all of the disinfectants are antiseptics. He would recommend iodoform as a most powerful antiseptic.

Dr. Morgan had said that it was impossible to fill root-canals perfectly with wood. It could usually be done with the six anterior teeth, which usually had straight single roots. He would never attempt to enlarge the root-canals of lower molars, considering it a precarious undertaking. He would fill them with oxychloride or gutta percha next to wood. He had been using wood for root-fillings for twenty years, with what he might call phenominal success and absolute accuracy. He considered it a mistake to introduce creasote or carbolic acid at first, which would block up the mouths of the tubuli, and cause the discoloration it was designed to prevent. He would treat first, and "kill every little germ that ever dreamed of living there."

Dr. T. M. Allen, of Eufaula, wished to ask the older practitioners if the teeth of twenty years ago were not of better texture than the teeth of to-day.

Dr. Morgan did not think so.

Dr. Allen thought they were worse now even than when he began practice.

Dr. S. G. Robertson, of Eufaula, described the method suggested to him by Dr. Rambo, namely, of flooding the canal with fluid phosphate of zinc, and with a broach wrapped with cotton, forcing it to the end of the root, the withdrawal of the broach pumps the air out of the canal, and the fluid goes to the end of the root. He had had opportunities since of examining roots he had filled by that method, and found the operation perfect—more so than any thing he had ever dreamed of.

Dr. T. M. Allen, on behalf of the Committee on Clinics, announced that clinics would be given the next day, from 11 A. M. to 2 P. M., at the office of Dr. G. M. Rousseau. It was desired that difficult cases would be brought forward for the occasion, from which all might learn something.

On motion, adjourned to 9 A. M.

THIRD DAY—First Session.

Thursday, April 15, 1886.

Called to order at 9 A. M.—the President in the chair.

Opened with prayer by Dr. William H. Morgan.

Roll called by the Secretary. Members present:

J. C. Wilkerson, H. D. Boyd, T. M. Allen, S. Rambo, D. A. Brown, R. B. Chapman, W. W. Evans, J. A. Hall, J. R. McNair, S. W. Tally, A. A. Pearson, W. A. Patrick, T. P. Whitby, G. M. Rousseau, W. D. Dunlap, E. S. Chisholm, R. U. DuBois, George Eubank, A. Jackson, S. G. Robertson, E. Wagner, J. R. Barr.

Corresponding Members—Mrs. Jeannie M. Walker, J. R. Walker, Prof. J. H. Coyle.

Minutes of yesterday's session read, and, on motion, approved.

Application for membership by W. A. Patrick, of Evergreen, Alabama, accompanied by the usual fee, was referred to the Committee on Membership.

On motion of Dr. W. D. Dunlap, of Selma, the names of Prof. J. H. Coyle, Thomasville, Ga.; Dr. J. R. Walker, New Orleans, La.; Mrs. J. M. Walker, ("Mrs. M. W. J."), New Milean, La.; were proposed for corresponding membership. Being voted upon they were declared unanimously elected.

The committee on membership reported favorably on the application of Dr. W. A. Patrick, and a ballot being taken he was elected.

Dr. Geo. Eubanks, of Birmingham, a member of the committee on Dental Education and Literature, read a paper on

DENTAL EDUCATION.

Mr President and Gentlemen of the Alabama Dental Association:

Seeing my name placed under the head of "Dental Education and Literature," and knowing the scarcity of such papers heretofore in our association, I feel it doubly my duty to say something upon this important subject. Every member of this association sees and feels the necessity of better education throughout the whole land in dentistry. First, it becomes us then, in educating ourselves, and elevating our own standard to strive to do the same for the public, whom we profess to serve. When we show that we respect ourselves, then the public will begin to respect us. It becomes us therefore, each and all who have the good of our profession at heart, to hold out our hands to our weak brethren and strive to lift them up. Do our duty to those already with us, but see to it, gentlemen, that we have no more weak brothers. Nearly all of us are members of some dental society, and as such have it in our power, if we will but work together to control the future of the profession, by refusing to receive students who will not agree to a full course of study. But just here some sensible brother may ask: "In what schools shall we recommend to give them a full course of study?"

What do we mean by a full course of study? We surely cannot mean one session of five months repeated to both classes alike. While the first term class has no practice at the chair the first session, neither do they get even a good variety of fillings the second term. And just here I will call the attention of the association to the propriety of issuing temporary license to students. Some one perhaps will say: "Well, we must help the young men along. They will never be able to attend the next term if we do not allow them to practice during their vacation." I tell you, gentlemen, this is not the way to help them along. It is an imposition on the public. It is injurious to the profession.

I do not wish to make any reflection on our Board of Examiners, but gentlemen, how many of our first term students have had the opportunity of putting in more than a dozen fillings (under the instruction of a demonstrator) during their time in school. And how few of them have ever had a preceptor, and even then most of their time was spent in the laboratory watching a vulcanizer, or polishing a plate. Not often allowed to touch a tooth to the stone or take any part whatever in which skill is required. How often do we have patients come to us with the bad effect of inexperienced hands. And how hard it is to convince them that dentistry is not a humbug. How often do we have our patients say that "I never had any trouble until Dr. So and So, filled my teeth, and I have had tooth ache ever since." This goes to show only some of the bad effects from inexperienced hands. Now, perhaps, some of our city brothers cannot appreciate this simple fact. But the best part of Alabama is filled with poor operators, and some of them even hold diplomas. And I tell you, gentlemen, that it is time we are doing something towards putting a stop to this kind of dentistry.

How can the educated members of our profession ever expect to elevate the profession and prove to the public that dentistry is not a humbug, when these very men are proving to them every day that it is a humbug.

It is true that some of our traveling men hold diplomas and can do splendid work, but it is an exception to the rule. Good operators are generally sought after, rather than they scour the whole county for a living practice. It is a bad sign to say the least of it How can we blame the physician for not liking that his time-honored title of Doctor be adopted and desecrated by the ignorant charlatan fresh from the work shop or plough, or from giving the cold shoulder to the whole body of dentists who make no distinction between the skillful and the clown? And the physicians are trying hard to hold up and elevate their profession. They have laws to regulate their practice in most

states. Look what has been done in that direction. Why they have issued circulars to the medical schools of the country, notifying them that hereafter their graduates *in this State* will be examined by a board and if they cannot pass a creditabe examination, they will be rejected and returned to them as not qualified to practice medicine in Alabama or they will be compelled to move to some other state where the public has no protection against quacks. And the result is that most of our young men are taking full term courses in medical schools that are becoming more particular every year whom they turn out. They know full well that if these young men strike certain examining boards in Alabama they will be rejected. These boards are not going to recognize hereafter the time-server and the charlatan.

It is true all these examining boards are not as strict as they should be, and let some into the fold that should have been compelled to attend school several months longer, and even some of them it would have required years to reach anything like being qualified to practice medicine. And we, gentlemen, must select an examining board of men who are willing to do justice to our students, justice to our profession and justice to our country. And fear not the criticisms of any of our schools. As some are already guilty of the base act of accusing our members of making a personal matter of affairs. And we gentlemen, must look after our profession. We cannot afford to leave it entirely in the hands of the dental schools. For some have already demonstrated to us that they are more in favor of swelling their purse, than elevating their profession which they seem to be so completely wrapped up in when they are approached upon the subject of Dental Education and Literature. Let us hereafter look to the law for protection, let us see that the public are no longer imposed upon by inexperienced hands. The past is irretrievable, but the future is in our hands, and let us make such use of it, in a short while we may find ourselves members of an acknowledged learned profession.

Dr. Walker said that he wished to congratulate the Society on having received this paper, which was one of the soundest he had ever listened to, on this subject. The question of recognition was continually being raised in our Association.

If we respect ourselves, we shall be respected.

He had but one criticism and that was in regard to students who came from "the plough and from the workshop." These occupations were honorable in themselves, and to them we owed many good men; but those to whom we object are those who have made failures in everything else, and who "take up dentistry" without proper education or preparation, because they have somehow got the idea that it is an easy way to make money.

There are too many dental colleges; they are getting to be as common as corner groceries; we should concentrate our energies, upon the best of those now in existence, using our influence to build them up, with greater facilities and better equipment. There are in the profession, as in politics, too many men who are ambitious of holding office. Finding no place in the colleges, they work to get dental departments annexed to colleges and universities of all kinds. We should oppose this, and throw all our influence in the scale with the colleges which have been tried and found trustworthy.

Above all let us drop the question of "recognition."

Dr. W. D. Dunlap said he had never been able to see the point in the question. There were doctors of different degrees; M. D.'s and D. D;'s and L. L. D.'s and all were *doctors* in common parlance. By which do we want recognition?

Dr. Eubanks said that we were not generally recognized as one of the learned professions.

Dr. Dunlap said that it was a tacit admission of inferiority on our part to be always making such a parade of the matter. He did not find any lack of recognition when there was a call for it. Whenever the field of operations is mutu-

al, physicians freely consult dentists if of any standing. He did not like the term.

The negro was asking for recognition because he has long been down and wants to be up.

Dr. Eubanks asked if he considered dentistry subserviant to medicine?

Dr. Dunlap replied that he ignored the medical profession, that dentistry was our profession, and he was satisfied with it as such.

Dr. Eubanks asked if he did not consider dentistry a branch of the medical profession.

Dr. Dunlap answered No; not any more than it was a branch of the barber's profession. Barbers don't recognize us.

Dr. Eubanks said he did not take that view of the matter. He would put it differently. We don't recognize barbers.

Dr. Walker: The medical profession has various specialties, as the oculist or the aurist, who are recognized as medical men. We require as much knowledge of the science of medicine as they do; in fact, we are medical men ourselves.

Dr. Morgan expressed his sympathy with the general tenor of the paper; the principles laid down were correct; but practically his ideas were off the line.

What is the after history of young men who have been the most distinguished in college, who have been medalists? A distinguished teacher, a man of thirty years experience had said he had known but one medalist who had become a leading man in his profession. He himself had been raised to the plough; had received his education in the common school; not that he himself was a fair sample, or claimed to be a distinguished man, but many distinguished men had not found it necessary to go through the full college course, the entire curriculum, to qualify themselves for successful practice. The men on the first Examining Boards were not graduates.

Dr. Eubanks said he spoke of future requirements.

Dr. Morgan said the leading men—the fathers of dentistry—had not been graduates. There were good men in the dental profession long before there were any dental colleges.

Men had attained to eminence in the past without the aid of a college, and they could do it in the future.

Dr. DuBois said that it was because such men had realized the inadequancy and seen the inconveniencies of the old system, that they wanted something better.

Dr. Morgan said he did not wish to be understood as saying there should be no colleges, but as condemning the results of the present system.

When an illiterate youth could not succeed at anything else, he considered that it was only necessary to go to Baltimore and take a course in dentistry, obtain a diploma and come out a finished dentist. Graduates were not always successes. They were practically often failures.

Dr. Miller, holding a high position in the German University, a most excellent theorist, would be considered a second rate practical dentist in America. The paper read conveyed the idea that operative dentistry was not taught in the first course in dental colleges. That was an erroneous statement. Operative dentistry was always taught from the beginning.

Dr. Eubanks said that they had little or no opportunity for practice.

Dr. Morgan said that some of the most beautiful fillings he had ever seen had been inserted by three months students; very difficult operations that could not be excelled by any man in the United States.

Dr. Eubanks inquired if Dr. Morgan considered that student qualified to go out and practice, because he could make a beautiful filling? Did he possess the ability to save the natural organs? Would he be liable to make a success as a practical operative dentist? Was it the rule to give opportunities to make fillings, from the word go?

Dr. Morgan: The institution which failed to give such

opportunity, however, made a sad mistake. The whole career of a dentist depended on his ability to do good work: by that he would be judged, and stand or fall in his profession. Mere fine opperations, however, did not make a skillful dentist.

Dr. G. M. Rousseau asked Dr. Morgan if he would be willing to recommend a first-class, first year student who wanted to go into the country to fill teeth?

Dr. Morgan replied that many young men, after one course of lectures, could make good substantial operations.

Dr. Rousseau thought that might probably be, he did not think they would be likely to keep it up.

Dr. DuBois thought that first-year students might be licensed to practice under older practitioners.

Dr. Morgan said that the most promising young men often turned out the worst failures; while the dullest boys made the greatest men. There are many things to be taken into consideration besides mere professional attainments—as integrity of character, ability of concentration; mere attainments were often deceptive. The brightest boys in school have never became leading men in after life.

Dr. DuBois asked if, everything else being equal, the one with the most education would not have the best promise of success?

Dr. Morgan said that, on the contrary, facts showed the dullest scholars made the greatest success. That Ephraim Ewing, who sat in his office for two years without a single fee, was afterwards pronounced by Mr. Clay to be the finest constitutional lawyer in the country. He eventually stood at the very head of his profession in Kentucky.

Dr. Roussean remarked that perhaps his two years of idleness gave him that much additional time for study.

Dr. Morgan said it was not possible to erect a standard by which all men could be tied down to. That Chapin A. Harris, who was a dull, slow plodding, boy, became the father of dentistry.

Dr. DuBois said that if he could have had the advan-

tages of a college education he would have done even more than he did.

Dr. Morgan said that education did not always prepare a man for eminent success; it sometimes spoils him. Too much education and training in logic and rhetoric would spoil a man for making a straightforward statemant of facts. He could not march right up and say what he wanted to say. We approach it gradully from all points.

Dr. DuBois said that perhaps in some cases, the dentist was like the orator, might be "born not made."

Dr. Morgan said that education alone was not sufficiant. The moral character, the natural vent of mind, the—to use Sam Jones' expression the "stickability" concentration. He did not want a "mechanical genius." There was too much diffusion; he would spend his time in experimenting.

Dr. DuBois asked permission to ask one question, with all due respect. "You say you were uneducated. Did you never feel the want of it. That you never determined to have it? Have you never felt that you would have done better, that you could have accomplished more if you had had a college education ? "

Dr. Morgan said that he had never felt the want of either Greek or Latin. He did not need it, and did not want it.

Dr. DuBois said that so many times in dental technology were derived from the Greek and Latin that it was a great help in getting at the true signification.

Dr. Morgan replied that it was true that many very simple things were covered up with very long names. It was much more simple to use a plain English word than to use a long unintelligible Latin term, and then have to stop and explain it.

Dr. DuBois replied that those terms were used in the books.

Dr. Morgan.—So much the worse for the books ! They necessitate learning two things in order to know one. The dental profession has outgrown all others. It has had phenominal success, and this was because it had not been bur-

dened with musty authorities to which it was necessary to defer. It owed all to present observations and deductions from facts. It did not ask what was thought five hundred years ago. It did not refer back to old libraries. Each man had to investigate for himself. Dentists are afraid of authorities and prefer to learn for themselves.

Dr. Eubanks.—There are not many born dentists, not many MORGANS and DUNLAPS. In small country towns, the dentist would find it very difficult if he had to wait to find out for himself all that he needs to know.

Dr. Morgan.—We don't want the dust of age between the practitioner and the people. There is much taught in the medical college that is a positive disadvantage to the dental student studying in a medical institution. Time is spent in learning things for which he will never have any use whatever. It is time and labor lost. There is enough in dentistry itself to engage a giant intellect without diffusing it over a broader field. Diplomas are *prima ficia* evidence of what? Not of qualification evidently. I don't bother myself about *recognition.* A man will be esteemed at his full value, at his real worth. His fellow men will recognize his true merits; a good man commands the situation. A man can educate himself and be well educated too. I would as soon turn a young man out to practice on a community as in an infirmary, for they are all alike, our fellow men. He may as well acquire practice where he will get something for it as to practice for nothing in an infirmary. It is a great mistake if he has not had practice from the beginning. It is true as was said that "the future is in our hands," but only to a certain extent. We cannot always predict certain success. "The best laid schemes of mice and men oft gang aglee." We may make our plans well, but working them out is another thing. Dental and medical colleges propose to qualify a man thoroughly, but they often fail. How many abandon their chosen profession, after having graduated with honor? They begin to lag in the rear from the very outstart. We cannot predict future

success or failure, from the amount of knowledge acquired at college. Some men who have immense reputations are really poor dentists. First-class failures, eventually losing one hundred teeth for one saved permanently. It is no greater a calamity for a man to make failures in practicing in a community than in an an infirmary. Let a young man get his first practice among his friends or wherever he can. He must make a beginning somewhere.

Dr. Coyle being called for, said that he responded with hesitancy as he had not heard Dr. Eubanks' paper. He had, however, heard some of the speakers and judged the tenor of the paper from the tone of discussion. Dr. Morgan had uttered some profound truths. Not all education educates. Much that passes for such does not help to fit a man for his avocation. It is only helpful in so far as it is useful to him. There is a great error in the popular mind as to what education is; what it accomplishes. You cannot teach a man what he cannot learn. A man cannot bring from Rome what he does not carry there. A blind man may gaze forever on the most beautified landscape and never be able to describe it. It is a sealed book to him. So of education. It can only develop the native material of the mind. It will bring out what is in a man, but it cannot put anything in. It is like the germ in the soil, waiting for light, heat and moisture, that it may put on its robes of beauty.

A man with capacity to seize, grasp, assimilate, will be educated. He appropriates and holds fast that which he needs. The dentist is to be educated to something beyond a mere handicraft. He grasps and appropriates the idea that he is to operate on living tissues. He must be educated to understand its functions and physiology. He is not working on a piece of granite that can withstand the sledge hammer blows of a mechanic's apprentice. All the knowledge of the physician is not necessary for him, but no dentist can intelligently treat oral lesions and certain reactions in the oral cavity, if he does not understand general

pathology. It would be the merest empericism, if he does not understand the nature of the disease. His success would be due to accident, if he had any success. He must understand anatomy and the microscopical development of the tooth, if he would successfully deal with dead teeth, pulpless teeth. He must understand the nature of special tissues. All these have a direct bearing on practical dentistry. It is very true that some colleges are too lax; the door opens too readily, both for entrance and for exit. No matter how gifted a man may be in collateral branches, as matter of fact, both time and practice are necessary for the acquirement of the mere handicraft. That is not all of dentistry, but it cannot be dispensed with. A watchmaker who has learned to handle well his own delicate tools, soon learns the mechanical part of dentistry. Brewster, who afterwards sold out to Evans in Paris, was a silversmith in New York. Thazar Parmly frowned upon him when he opened a dental office, because he thought he had not had the proper tutoring; but he had the true grit, and he had had thorough mechanical training in a trade which required allied manipulation. That he made a success, is well known. Take one hundred average young men, and with the same training and the same opportunities, the majority will not possess this essential handicraft. The colleges of the United States have done a good work. To them is due the rapid advance of the profession, but the curriculum and the standard for graduation must be raised, and especially the standard of admission. Students must be rejected if found deficient in elementary education. The result will demonstrate the wisdom of this course. If a student comes in near the end of the year, he must study all the harder, and do better work. The faculty must also come up to higher standard. Formerly they heard lessons; they did not teach. We better understand the needs of the profession; we realize our dependence upon ourselves, and our independence of the medical profession.

Dr. Morgan—It has been said that no man could treat

disease who did not understand its pathology. Does any man understand the pathology of decay? of Rigg's disease? Who is that man?

Prof. Coyle—That is one of the misfortunes we labor under—the munity of using language that is not critically exact. When we say we understand pathology, we mean within the present limits of investigation. We know that there is destruction of tooth-substance under certain circumstances, and from those circumstances we know something of the causes. We do not know to a certainty how it originates; there are varying theories. We talk of vito-chemical forces and chemico-vital forces, but all that has no practical bearing on the operation of filling, and of so filling as to save the tooth. That is not a question of therapeutics; it is purely mechanical. The practical point is that there is a disease that produces a loss of tooth substance. In filling teeth, we propose to arrest further loss; to stop decay, not to cure the disease varies. In Pyorrhea Al veolaris, there is a departure from pathological conditions. We do not understand it entirely, only to a certain point; but we do understand its pathway, or, from our success in treating it, we think we do, though future microscopy may prove us all wrong. In that case, therapeutics will be adjusted to future revealments. We could not undertake to do what we are doing, unless we understood it in part at least.

The death of Dr. A. H. Bradley, of Pollard, Ala., was announced, and Drs. Brown, Eubank and Patrick appointed a committee to draft suitable resolutions.

On motion, adjourned to witness the clinics at the office of Dr. G. M. Rousseau.

To meet again at 3 P. M.

THIRD DAY—SECOND SESSION.

THURSDAY, April 15.

Called to order at 3 P. M.—the 1st Vice-President, Dr. H. D. Boyd, in the chair.

Dr. T. P. Whitby, of the Committee on Dental Education and Literature, read a paper entitled

EDUCATION AND LITERATURE.

Gentlemen of the Dental Association:

It was with diffidence that I accepted the part assigned to me in this body, this assemblage of men representative of the culture of the State of Alabama. Diffidence, because I know my inability, compared with that of others present, to treat this important subject with the knowledge and power it deserves, yet with this frank acknowledgment of my inability permit me to assert, that no one present feels a deeper interest in this all important subject, no one whose zeal outruns mine, and that while a more able advocate might be found you could have selected no one more zealous.

In ancient times there was no sharp divisions of the profession as there is among us of to-day. The successful leader of land forces did not hesitate to take command of naval armaments and win great victories at sea. The soldier put off his armor, donned the toga and plead law in the civil courts of his country. The practice of medicine and surgery in their various branches was strangely mingled with what are now considered entirely different professions. The barber, now confined to cutting the hair and shaving the face, was formerly expected to be a surgeon, and did practice surgery. This queer mingling of professions lasted till about four centuries ago. Men then learned that a greater proficiency could be attained, and mankind more benefitted by each person concentrating all of the energies of his mind to one profession. Then civilization with its

concomitant arts and sciences made more rapid strides than was ever known in the history of the world's progress. But men rushed to the opposite extreme. As before, a man practiced several vocations, now men devoted their whole time and mental energies to one profession. While mankind at large was benefitted by this course, while the arts and sciences made more rapid strides, the individual himself was incalculably injured.

The sad spectacle of men, grossly ignorant of everything outside of their individual professions, was constantly occurring; of sailors knowing nothing but their ships; of lawyers knowing nothing but the law, and of physicians knowing nothing but medicine; of dentists knowing nothing but to extract a tooth, take an impression of the mouth and build a plate and perhaps to fill a tooth. Not till the eighteenth century did man find that, while to attain the highest success in any vocation, that vocation and that alone must be followed, yet the cultivation of the mind in the broad field of literature added strength to the mind of man in his particular vocation. The European, while praising without stint the American's inventive genius, his business tact and progress in material prosperity, condemns in the strongest terms his want of a higher culture, his lack of that due proportion of the various faculties of the mind which the German calls "many mindedness." Lord Coleridge, after a visit to our country and after a close study of American character, noticed this defect, and advised as a remedy, "that the American classics be generally taught in our schools."

The State of Massachusetts, aroused to the fact of this deadening of the higher faculties of the minds of her people, enacted that imaginative literature should be taught in her common schools. This utilitarian mode of instruction, this teaching a boy to be a mere money machine, is already bearing its crop of poisonous fruit. The cry of corruption is heard in our legislative halls, and the echo is returned from every village. In no department of official or private

life is there less corruption than in the army and navy; and though other reasons are assigned, I am firmly convinced that it is mainly due to the high and broad course of instruction given at Annapolis and West Point. In no college of our land is a general culture of the mind more strictly enforced.

An old lawyer, who had won great distinction at his profession, said to a young man just commencing the study of law, "Young man the law is a jealous mistress and will not admit of no divided affections." That remark is a truism equally applicable to all professions, but it *does not mean* the perpetual running of the mind in one groove, to develop one faculty abnormally and leave the other weak and starved and helpless. The Great Creator when He breathed into man a living soul never intended that the mind should be so used and so abused.

This work, the work of Dentistry, as well as all other works committed to man, can not be accomplished but by an intelligent apprehension of the subject. It becomes us then who engage in it, to seek that qualification which will render us efficient in the accomplishment of the end.

Never, in the history of the world, has there been such a mental upheaval, such a volcanic eruption of new ideas, and such a subsidence of old opinions as is taking place in our day. Old land marks are being swept away, and strange thoughts evolved as to the problem of life.

In the civil world communism, socialism and nihilism are threatening to sap the whole social fabric. Agnosticism, skepticism, and atheism, like dark clouds envelop the religious structure. Amid all of this I believe that the heaving, pulsing, struggling heart of humanity is gravitating towards right and proper knowledge. "Men are groping through darkness into light." Who then is willing to leave this battle of mind to be fought out by others? to let others build that he may enter therein?

Which, on motion, was received, and declared open to discussion.

Dr. E. S. Chisholm, of Tuscaloosa, said that the present great need of the profession was text books better adapted to the wants of students, laying down fundamental principles. There was no deficiency in quantity; the journals furnished a great abundance of reading matter; the difficulty lay in its inferior quality. The text-books now in use, were not commensurate with the present standing of the profession; its recent rapid growth. We also need books which start farther back; graded school books, as in all other branches of education.

This paper not eliciting any discussion.

Dr. R. U. DuBois, of Greensboro, read a paper on Chemistry, which was received.

CHEMISTRY

People may talk about the glorious progress of our age, boast of the wonderful inventions and discoveries of the nineteeth century which have multiplied comforts and luxuries to all classes and promoted health, wealth and happinesss; scientists may proudly call this era a new leaf in the pages of practical and scientific history, but if they could push aside the curtain that separates the present from the dim, distant ages of the past, their surprise could only find expression in these words: "There is literally nothing new under the sun." A careful consideration of this truth, will reveal to us that the vast machinery of art and science, including the two branches whose uses and relations we are about to briefly discuss, is but the continuation of the same system that was set moving by the hands of the ancients, though, of course, greatly improved by laborious study and thorough investigation. The Dentist, as well as the Physician, is greatly assisted in his profession by the study of Chemistry, and each has cause for gratitude to those men, who, after long years of toil, have succeeded in giving to the world so much valuable knowledge on such a very important subject. The history of Chemistry is exceedingly interesting, and many facts concerning it can be traced back

to the earliest times. The ancients, of course, had very crude ideas and not until all the facts gathered by observation and experience had been collected and explained, could Chemistry deserve the name of a science. Although but little is known of its progress from the first to the fourth century, it is probable that much of the knowledge which had been kept secret by the Egyptian priets was now published and taught at Alexandria. Previous to the latter period Chemistry had consisted only of a collection of imperical facts without intimate connection or definite purpose upon which no theoretical views of any kind had been found.

The chief object of the ancients was to ascertain a way by which the base metals might be converted into noble ones, iron into gold and silver, and for a long time they lived in the hope of discovering the Philosopher's stone the touch of which would change mercury into gold, and was also regarded as capable of curing all diseases. However, all these false ideas have been laid aside and replaced by true ones and now Chemistry comes boldly to the front, occupying an important position among her sister sciences.

Indeed, such is the relation existing between this and every other branch of useful knowledge, that it may be compared to a link in a chain without which the chain would be incomplete and comparatively worthless. Every object accessible to man is embraced in the wide circle of chemical science, and nature is the great laboratory from which the Chemist obtains his materials.

In the wide world around us, we can scarcely touch, taste or see anything that is not in some way connected with this interesting science. The very air we breathe, the sparkling water that not only helps to sustain human life, but falls in cool and refreshing showers to revive the drooping plants, the beautiful flowers blossoming in wood and dale and delighting us with their rich fragrance—all these and thousands of other things can be mentioned to which a knowledge of chemistry contributes for more interest than they already possess. When we behold the trees of the forest

standing in all their stateliness and grandeur, do we ever pause to consider what is the greatest benefit they bestow upon man? Ask the Chemist and he will refer you to all the valuable and life-saving medicines, the elements of which these vegetables have yielded.

This, though, naturally leads us to the study of chemistry in its relations to medicine and dentistry also, for these two professions are more benefitted by this science than all the rest. Organic Chemistry is of more importance here, though many valuable medicines are obtained from the medals.

In regard to medicine, Chemistry divides the empire with Physiology, if she does not claim the greater part. The anatomist must understand the structure and functions of man's complex organism, and here a knowledge of chemical constituents is of material assistance. From a thorough knowledge of the structure and functions together with a theoretical and practical knowledge of diseases the physician forms his diagnosis of the case. Once this step is taken, he must appeal to chemistry for those agents that will correct abnormal conditions, restore vitality, excite action and allay irritation. And right here it may be proper to say a few words in regard to Toxicology or the science of poisons, with which chemistry has an intimate connection and without a thorough knowledge of which many have been hurried to an untimely grave. Some of the most useful medicines, and the most violent and dangerous poisons, are composed of exactly the same elements, in different proportions, have almost the same chemical formula, and even look and taste alike. Indeed, such is the resemblance that it requires very often the utmost skill and nicest discrimination not to mistake one for the other.

In the department of dentistry, the most wonderful advances have been made and the dentist like the physician is blessed in having the science of chemistry to refer to for the various agents he employs in his profession.

Beyond a few simple, conservative processes, and the

barbers much dreaded key, humanity lay at the mercy of toothache. Old age was hideous in its ghastly toothlessness. The panting lips of beauty that *were*, must now shrink and shrink in most unseemly emptiness, and the pearly tones that charmed in youth must change to a husky whistle. The manly jaw that marked decision and force of character must now work like a pump handle in the vain effort to talk. But a single touch of chemistry and vulcanized plate, enamelled molars and incisors adorn the shrunken faces of now happy and beautiful old age.

The value of the teeth to human beings is so prodigious that as soon as attention was turned to their proper management and the methods of repairing their losses, ingenuity and inventive talent began to exert itself upon this new department of human industry. Wonderful changes have taken place in the dental profession since it first emerged from the rude, humble place where it had its origin, and, like the eagle, kept soaring aloft, getting higher and higher, until to day, though already upon a firm basis of importance and usefulness, it is still striving to attain such perfection as will place it on the topmost pinnacle. The young modern dentist would soon grow discouraged and give up in despair, were he compelled to shut his eyes to the bright ight that now illuminates his pathway, and with rude instruments to toil on in the darkness in which his forefathers groped in the past. To describe and tell the history and uses of all the various instruments, machines, &c., which have been invented to save the dentist time and labor, would no doubt be interesting did it not deviate somewhat from my subject. But it will be appropriate, just at this point, to say a few words in regard to that valuable compound, cocaine, as it has an intimate connection with chemistry, and then it is not only of the greatest use to the dentist in extracting teeth, but is even of more value to the physician. Cocaine was recently discovered by Dr. Koller, a young physician of Vienna, and was obtained by distilling from the cocoa plant, which is a native of Peru. It has

largely taken the place of chloroform, laughing gas, and the other anæsthetics, as, unlike these, it leaves no enervating results. One application will cause the gums to feel perfectly numb, as if frozen, but the effect soon passes away.

> Full many a tooth that's sore and aching too,
> The wretched mouth of mankind fills with pain;
> Full many a time 'tis pulled, without a groan,
> By the simple, magic touch of cocaine.

The chief *objection* to cocaine is its expensiveness, the cost of a single pound being $3,280. Not only is dentistry looked at from a practical standpoint, but the poet, even in the earliest times, while invoking his muse to wreathe in beautiful metaphors and similes, the silken tresses, violet eyes and coral lips of the maiden did not neglect to sing also of the pearly rows which her bright smile revealed. A modern poet has truthfully remarked that there is no gem in the royal crown for which a young queen would give one of her front incisors; and, thus we see, there is no element of beauty that can surpass white, even, well-shaped teeth. While good teeth are highly ornamental to the human countenance, this is a small consideration when compared to their utility. On them speech is so largely dependent that their absence would cause our language, now noted for euphony and distinctness, to be but a confused mass of vowels and consonants. As the flowery words of the orator, arranged into systematic, pleasing sentences, flow from his mouth in a perfect stream of eloquence, does he ever pause to bestow a grateful thought on the dentist, the touch of whose skillful fingers has not only improved his expression, but greatly assisted his articulation? And then, think of the necessary function of mastication—how very important it is to perform this well; for the food imperfectly masticated, will, of course, be improperly digested, and thus the whole physical system be completely deranged, and a "sound mind in a sound body" no longer be enjoyed. Dentistry has existed as a distinct calling in the United States about three-quarters of a century, and though

it still has its imperfections, and many things are needed for its development, yet, to say the least, it is a wonderful exhibition of rapid progress. And as little things help to make up the great things of life, let each of us lend our aid, however small, to the improvement and building up of that profession to which we have devoted our energies, our talents, and our lives.

(NOTE.—This paper was written for the meeting of 1885, but was not read, which accounts for it seemingly being out of date.—SEC'Y.)

This also passed without discussion.

The President, in calling for remarks on the paper, said that at a certain feast of old, where water was turned to wine, the best had been kept to the last.

The Committee on Clinics reported that clinics had been given at the office of Dr. Rousseau, in which Dr. Coyle, of the Baltimore College of Dental Surgery, filled two upper molars with gold, for Dr. DuBois, and Dr. T. M. Allen filled an upper molar for Dr. A. C. Walker. These were watched with great interest by the visiting dentists.

The Committee on Resolutions on the death of Dr. A. H. Bradley, reported as follows:

RESOLUTIONS ON THE DEATH OF DR. A. H. BRADLEY, OF POLLARD, ALABAMA.

MONTGOMERY, ALA., April 15, 1886.

WHEREAS, Our Association learning, with deep regret and sorrow, of the death of our friend and professional brother, Dr. A. H. Bradley, of Pollard, Alabama, in the prime of his manhood and usefulness to the dental profession and to humanity; therefore, be it

Resolved, 1. That we appreciate the upright, conscientious and earnest services of Dr. Bradley in his profession, and to the Association of which he was a member.

Resolved, 2. That our sympathies, true and heartfelt, are

hereby tendered to the family, relatives and friends of the deceased, in this sad and inscrutable dispensation of Divine Providence.

Resolved, 3. That the city papers, also the Conecuh *Star* and Escambia *Times*, be requested to publish these resolutions, and the Secretary be requested to send a copy of the same to the family of the deceased brother.

GEORGE EUBANK,
D. A. BROWN,
W. A. PATRICK,
Committee.

Dr. W. D. Dunlap said that several subjects had been passed without thorough discussion, and suggested that the roll of standing committees be called again, and the different topics discussed as they came up in order.; that it should be considered the duty of each member of the committee accepting the position to furnish a paper. Even the youngest member could do something, and it was his duty to do so. From this the Alabama State Society would make up its records.

Dr. S. G. Robertson, of Eufaula, hoped that Incidents of Office Practice would be taken up, that we might get practical things to take home and put into practice. He did not want to hear what is in the books; we could read that any time. He suggested five minute speeches on practical subjects.

Dr. Dunlap seconded the motion that each man take five minutes and say something, and then shut up. Not to undertake to tell about *failures*, though, for that could not be done in five minutes.

Dr. Walker said that as usual in all Associations, as the time for adjournment drew near, there was manifested a disposition to hurry through and get home. Some were afraid to say anything for fear some one else would reply, and another discussion be elicited to take up time. But that was what we came for, and we did not want to go home

with the wrinkles half taken out. To him the last quarter of a meeting was always the most interesting. Some had just waked up. When things were rushed through men went home complaining that nothing had been done, and declaring they would go no more.

Nothing had been done by the committee on Theory and Practice ; not enough had been said on the subject of Education ; there had not been enough Clinics—they were not half through.

Dr. Dunlap moved that Incidents of Office Practice be made the special order of business to-morrow morning

Carried.

Dr. Robertson moved to amend by limiting each man to five minutes, and no man to speak a second time till all had had a chance.

Dr. E. S. Chisholm said that ten minutes was the limit but the rules could be rescinded to make it only five minutes.

Dr. T. P. Whitby, of Wetumpka, said that if it were to be made obligatory on each man, that he must speak five minutes, no more, no less, when his turn came, many would not come at all. He would debate that motion.

Dr. W. W. Evans, of Union Springs, said that he did not wish to hurry matters at all, though he should be very sorry to leave before the election of officers, and he was obliged to go home in the morning. That no one enjoyed the meetings more than he did, but there was a definite limit to his absence from home. That he had been going to conventions since the first one, that is since 1854, and that he was in love with them. He was not going home to make money, but there were unavoidable reasons why he must go. He therefore offered his apologies in advance for his absence at the time of the elections.

The *five minutes* question was again taken up.

Dr. Dunlap moved to amend the amendment, and suspend the rules so as to limit the *discussion* of Incidents of Office Practice to five minute speeches, allowing each man all the

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time necessary to fully and fairly detail the case presented.

This was carried.

The subject of

DENTAL EDUCATION

was re-opened for discussion.

Dr. Walker said that Dr. Morgan had, in the previous discussion of the subject, taken a position in favor of allowing students, under a temporary license, to begin practice, after their first session; that it was as well for them to acquire proficiency in general practice as in the infirmary when their patients were equally our fellow creatures, etc.

Now, it was expected that in the infirmary, their work would be carefully done, under the guidance and supervision of instructors who would see that it was properly done. Such work was also done for people who could not pay for such services, and who, for that reason, willing to have it done by slow and inexperienced hands, under the guidance of preceptors, also knowingly taking some risks of imperfect operations, on those conditions. It was perfectly correct, with these things understood, that the young dentist, should in this way, receive practical instructions and acquire experience, in possibly saving teeth that otherwise would be entirely lost. But, on the other hand, by giving the student a temporary license to go before the public, you endorse him as competent; as prepared to perform all dental operations. The result almost inevitably will be destruction to the teeth of any possible patients, and must prove a great damage to the profession. He was in favor of giving young men every possible opportunity, but of doing it in the right way, and not at the expense of those who are paying for what they suppose to be good operations. They, pay two, three, or five dollars, to save a tooth for which there is no compensation if it is lost. They had better pay that incompetent young man to let it alone. Such independent experience was not good for the student, who needs

guidance and supervision. He was very much surprised to find Dr. Morgan an advocate of such a practice.

Dr. S. G. Robertson asked how then were these young men to acquire practice and experience?

Dr. Walker replied: In the Infirmary, under a preceptor, during his whole college course.

Dr. Robertson thought that if young men were sent home to read books only during their vacations, they would never make dentists. It was the duty of those already in pracice, to help them along. Let them go into the offices of the dentists already established around their homes, and let those dentists give them opportunities for practice. He, for one, was willing to open his office to them, and allow them every opportunity. They are to come after us, and take our places, and we should see that they are fitted for it. When they come from college they have theory; they have a diploma; they have a medal, or prizes, but they have no practicality,

Dr. Walker said he would never stand in the way of the advancement of any man, and especially young men; but the dental law was made to protect the people from empiricism; not to protect men in the profession. If then temporary license were granted it was an evasion of the law. We would not allow these students to go into our own families to acquire their experience. If the student, in vacation, has more time than he knows what to do with; more than he can profitably employ in study, let him go into the office of any dentist who has time to supervise his work and guide him, but don't turn him loose on the community.

Dr. W. W. Evans said that he did not like that mode of expression—turning them loose on the community.

The young men who came home after one college course were often much better prepared than older men. He could not see why it would be any imposition. If the community was willing, let him try. He did not consider that it would be any imposition. It was a matter of free choice with the people.

Dr. Walker said that people did not do it with their eyes open. If their eyes had been opened they would know that it was the way to loose their teeth, but that license blinds them. He would give young men every proper chance, but would not allow them to gain their experience under such disadvantages. One week of practice under a competent preceptor was worth six months practice in such a wild fashion. If they were short of funds there were other ways of making money in vacation time.

Dr. Dunlap said he differed with Dr. Evans in regard to the propriety of allowing inexperienced young men to be sent out to practice under the sanction of the Dental Board of this State. When he was working to obtain the passage of the Dental law, he met at the State capitol a distinguished physician, who announced his opposition to all such legislation. If a man chose to employ an incompetent blacksmith, or a shoemaker, he was at liberty to do so, and he believed in protecting the liberties of the people! He thought such discussions would deter young men, and he wanted to encourage them. Dr. Dunlap said that if the colleges were not doing their duty he wanted them kept up to the standard, and the same of preceptors. Young men should be frequently examined as to their proficiency. One young man who had applied for a temporary license had, after a partial examination, been advised to withdraw his application and go home and study another twelve-months. At the end of that time he had never found a young man brighter in theory or better up in practice for the time of study. And he had most cordially thanked the Board for what they had done, admitting that he now realized that twelve months before he had not the least idea of what dentistry was. Men differ greatly in capacity. One man may acquire more theoretical knowledge in three months than another in three years; but that is not the question. Even a shoemaker can not become competent in three months. And what shall we say of dentists who are turned out in three or four or five months? He had not

forgotten his own experience when a young man, under pledge to his father to remain two years in the office and then go to college. After three or four months he had abandoned the office and gone to a Southern college during the commencement, which counted for one term. After two or three months of the next term, he passed and got his diploma. That was the great evil of some colleges. This discussion would be very profitable to us if it brought out the best way to remedy such evils.

Dr. Eubanks said he knew of a young man who had attended one course of lectures. He had not felt any interest in the subject of regulating teeth. His first patient was a young lady of fourteen years of age. The canines were outside of the arch, and he extracted them both! Of course her mouth and her face were ruined. Such practice was a great injury to the profession. The family of the young lady thought, because the young man was just from college, of course he knew all about teeth!

Dr. Robertson thought it did not hurt the profession, probably, as it did the young lady! We all do things that hurt the profession. We all make mistakes, and we profit by them. That is the advantage of mistakes!

Dr. Coyle said the law should be complied with, and license granted only if found competent. There should be no question of limited or unlimited; the man must be found competent in all respects. There should be no such thing as the examination of one-course students for temporary license. No man could be competent to practice in that limited time. He was only on the threshold of the knowledge and experience necessary for general practice. He might possibly be able to make a rubber plate and to put an amalgam filling in a simple cavity, but he was not competent to go into general practice. He could not justify the issuing of licenses after one year's study. If he wanted to make money he could go back to the dental hospital, or the infirmary. They would charge him nothing for bringing in his own paying patients. In that way he would do no one

any injury; he would obey the law; the public would be protected from empiricism and malpractice. We should go very slow, and be very careful about granting temporary licenses.

(The word *adjourn* was here heard.)

Dr. Chisholm hoped the subject would not be passed yet. He wanted the Alabama Association to stand well in this matter.

Dr. Robertson said the subject of Pyorrhea Alveolaris had not yet been named. If the four stages of the disease were all taken up it would require some time.

Dr. G. M. Rousseau said that licenses could only be granted at the annual meeting of the Board, and then only on satisfactory evidence either of college graduation or of competency; but that temporary licenses could be granted during the interregnum.

Dr. DuBois said that all such temporary licenses expired on the day of the annual meeting. He inquired if such a temporary license could not be obtained year after year by applying after the date of the annual meeting?

Dr. T. M. Allen replied that a temporary license could only be granted once to any man.

Dr. Chisholm said: Suppose that Dr. Morgan, for instance, should move into Alabama three days after the adjournment of the Board and want to practice. He would have to wait twelve months for the next annual meeting before he could practice, because he could not get a license. Any other man equally competent would suffer the same inconvenience. There must be some discretion allowed. Travelling men, going here and there, could get temporary license. It was a sort of inter-state accommodation arrangement of difficulties.

Dr. Dunlap said that the Act required that the member who issues a temporary license, should be satisfied of the qualification of the applicant, but if he came before the Board and was rejected, he had no chance. A permanent

license had to be recorded in the Probate Court, at the place of his residence, in Alabama.

If Dr. Morgan came every year he could get temporary license, which was not recorded.

If his permanent license was on record, and he moved to another State, and came back, he would have to get another license, and pay $15.00 each time.

Dr. DuBoise said if a man could get a temporary license each time he came into the State, it would amount in fact to a permanent license. Men from other States could not be excluded from practice in Alabama, but a man who was authorized to practice in Georgia must pass an examination and get an Alabama license before he could practice here. A man who was a permanent resident of Georgia, for instance, had no right to a permanent license in Alabama, when he has no residence To obtain a permanent license, he must live in the State—have a legal residence in Alabama.

If he moves to another county, he must get a certificate from the probate court, as to his license.

On motion, adjourned to 8 P. M.

THIRD DAY.—Third Session.

Thursday, April 15th.

Meeting held in the Reading Room of the Exchange Hotel.

Called to order at 8 P. M. The President in the chair.

Dr. Dunlap, being called upon, related the following

INCIDENT OF OFFICE PRACTICE.

Twelve months ago a young man called upon him, who, three or four months previously had had the central incisor

extracted. The socket had not filled up, and there was a fistulous opening through the gum. There had been an aveolas abscess, and he had been instructed, by the man who took out the teeth, to treat it with aromatic sulphuric acid, injected with a hypodermic syringe which he carried in his pocket. Examination showed a piece of nicrossed bone back of the original line of the tooth-socket, fully three-fourths of an inch back.

He concluded to attempt the removal of the bone without the use of the knife or chisel. The bone was loose and could be moved about. The opening was as large as a medium-size pea. He tried with forceps but could not get firm enough hold to take it out. He then tried crumbling it but could not grasp it with sufficient force. With surgeon's forceps he finally removed a piece of bone three quarters of an inch long; which from its shape and thickness and curve he recognized as the inferior turbinated bone. In a short time the opening healed up, and the patient was dismissed. It was the first instance he had ever known of that bone being involved in any tronble from the teeth. He had found an opening into the nasal cavity, but it healed without perforating.

Dr. S. Rambo said he did not see how he could extract that bone without going above the floor of the nasal cavity.

Dr. Dunlap said he went back three-quarters of an inch from the socket line, and drew it through the socket.

Dr. A. T. Pierson said he did not understand how he could get at the turbinated bone through an opening so situated. From its position he should judge it was rather the lachrymal projection, which was the only bone of that shape and form in that location.

Dr. Dunlap said that he had identified the bone by comparison with a skull. He treated it for six months before it healed completely. The patient wore a plate with two teeth. He had no disease, nor any taint of the system, as far as he could learn.

The only conclusion that he could reach, was, that the

dentist had extracted the tooth on account of the abscess. And that treatment for three months with aromatic sulphuric acid, injected into living tissues, had brought about the result.

Dr. J. A. Hall inquired if the bone was in its normal position, or whether it had fallen down?

Dr. Dunlap was not able to say.

Dr. T. M. Allen inquired if the dentist who had done the extracting and prescribing, was a member of the Alabama Dental Association?

Dr. Dunlap replied that he was a member of the profession and a prominent man. Had possibly once been President of an adjoining State Society.

Dr. Chisholm thought it might have been induced by the action of the acid, in a diseased condition of the system. Aromatic sulphuric acid was very strong, and would dissolve bone, though it was taught that it would not hurt living bone. It does, however, affect dead tissue.

The patient also might have misunderstood the directions, and had perhaps thought that if a little was good, more was better.

Dr. S. Rambo said he had had considerable experience in the treatment of abscesses. He had found where there was free suppuration, scales of aveola were taken off in suppuration for a long time. Why not in the same way, from the anterior plate, or even the posterior plate. Pus had burrowed and produced death to the bone. It must have burrowed very far up, to reach the bone described.

Dr. J. R. Walker, New Orleans, described a case of necrosis. The right superior bicusped was dead, and very dead at that. There was an active alveolar abscess, opening both outside and inside, and it proved to be a very obstinate case. He cleaned the cavity, and put it in sanitary condition, but found there was necrosed bone above and behind the root of the tooth. He packed the opening with cotton, and, introducing a burr, cut away the bone for a space larger than a large pea. He burred out all the ne-

crosed bone, not removing any single pieces. After a lengthy treatment, he succeeded in restoring the parts to health and saving all the teeth. He had had occasion to make a trip to Western Texas, looking after some land interests. There he met with another interesting case of necrosis. Dr. Atkinson, some time previously, had made an operation for necrosis, on the right side, removing considerable bone. The same trouble had recurred on the left side. The socket of the left superior molar was necrosed, and also, to some distance, beyond the socket. He had restored it to perfect health. He used permanganate of potash in all such cases, a preliminary wash. In opening up dead teeth there was always a liability of arousing active conditions. If carbolic acid was used in the beginning, there would most probably be inflammation and pus. With permanganate of potash for the first treatments, this was avoided. Used carbolic acid to finish with in the last dressings.

Dr. J. C. Wilkerson asked in what strength he used the permanganate?

Dr. Walker replied that he never measured it. He dissolved a few crystals in a glass of water, judging of the strength by the color, and varying according to the demand of the case in hand.

Dr. A. T. Pierson said that Turkey red was about the right color.

Dr. Walker said he varied according to the case. For a simple disinfectant, he made it very pale in color; for a very strong odor, he made it a very deep claret color. It was especially valuable in destroying the odors of dead teeth.

Dr. S. Rambo said that Darby's Prophylactic Fluid owed its efficacy partly to permanganate.

Dr. Wagner, of Montgomery, reported a case of necrosis. The left inferior wisdom tooth was abscessed, and the jaws locked. He could not get the forceps in for the extraction of the tooth. He opened the abscess, the odor plainly tell-

ing of necrosed bone. When the jaws relaxed, he took out the roots of the tooth, with the sac adherent. Probing the socket, he found necrosed bone posterior to the socket of the wisdom tooth, at the angle of the jaw. The surface was rough, and the odor left no doubt as to the trouble. When the jaws had sufficiently relaxed, with a bistoury, he opened the soft tissues, and with forceps removed the detached bone, and treated until cured—probably two weeks—treating with Darby's Prophylactic Fluid. He thought there was now some reproduction of bone.

Dr. Dunlap related another case of necrosis. The lower second molar, for two or three years, had given more or less trouble. There was no soreness on percussion, and no cavity, though the surface was worn down. It was an isolated tooth. Treatment with a twenty per cent. solution of nitrate of silver gave some relief, but not permanent. After two or three weeks, the patient had terrible pain in the face. Bathing the face with warm water gave temporary alleviation. Examination revealed necrosed process, with a portion of bone denuded, but not detached. He burred and cauterized at intervals for six months, and all in the dark, under the soft tissues, as the case was not sufficiently severe to dissect it out. There is still some slight pain in the jaw, but no offensive discharge.

Dr. S. Rambo asked what he cauterized with?

Dr. Dunlap replied, with almost everything he had ever heard of—carbolic acid, creosote, aromatic sulphuric acid, nitrate of silver—everything he could think of, in the effort to reach the nerve that was giving the trouble.

Dr. Geo. Eubank, of Birmingham, narrated a very interesting case. A young man of 28, had been injured by the caving in of a mine, with two or three tons of coal falling on his head. He had the superior maxillary fractured twice; behind the wisdom tooth, and one-fourth inch from the median line. The lower jaw was broken in three places. He had also a terrible scalp wound. He was unconscious for half an hour, but was restored with brandy. In making

further examination, in pressing the superior maxillary into place with his thumb, the lower jaw sprang out of its socket, and it was very difficult to get it back. Three teeth, two bicuspids and the first molar were knocked out. He put them back and ligated with silver wire. When the portions of the jaw were all brought into position, the teeth knuckled together nicely. With his knife he carved out a splint which held the jaws in place. He was fed through the space of some missing teeth. The accident occurred on the 20th May; on the 13th June the upper jaw was perfectly united. In the lower jaw there was slight *symphysis*, but he did not think it best to break it open. From the 20th May till October he did not see the patient again, but in October he found the mouth opened almost normally. There had been no abscess from the replanted teeth, and all the fractures had united nicely, the articulation being almost as perfect as ever.

Dr. Dunlap said that he had reported a somewhat similar case at the last meeting of the society. The lower jaw was split in half by teeth driven through. The upper jaw was in three loose pieces, entirely detached.

Dr. E. S. Chisholm said that he had had some interesting experiences in correcting projecting superior maxillaries, by trimming down the alveolus, with almost instantaneous results. In one case, the patient, a lady of 28 or 29 years of age, had considerable projection of the upper jaw. She had rosy cheeks and black eyes, but her mouth constituted a hideous deformity. There was good antagonism of the molars. He took an impression of the mouth, and constructed a plate setting the anterior superior teeth fully one-half inch further back than they were naturally, finishing the plate before commencing operations on the mouth. From having no antagonists the lower teeth had elongated until they struck the upper jaw in the rear of the sockets of the teeth. When the plate was ready, he extracted the six upper front teeth, split open the gum, and trimmed away, with a wedge forcip (pivot cutter) the alveolus and

septi, posterior to the sockets of the extracted teeth, shortening the upper jaw fully one-half inch. He then trimmed the overlapping and laps of the gum and brought them together, and inserted the plate, which fitted beautifully and made a very great improvement in the face. He then dismissed the patient, instructing her to use astringent washes. He made a permanent plate a few months later, and as the final result she was soon after very happily married! (This case was reported in the Southern Dental Journal for February, 1886.)

He had had three similar cases, all with good success.

Dr. J. R. Walker inquired if he would not have extracted the first molars and drawn the anterior teeth back?

Dr. Chisholm replied, that though the teeth were sound, they were denuded, the bone absorbed and the gums diseased. The whole operation was completed in about ten minutes. Where there is great prominence the alveolar can be trimmed without any trouble. There was very little bleeding; he applied nothing but whisky to the gums.

Dr. Boyd said he had rather a peculiar case now on hand. A lady who had lost the superior incisors many years ago, followed by considerable absorption. The more recent extraction of the cuspids and bicuspids had not been followed by similar absorption, and left the gums quite as prominent without any teeth as would usually be the case with teeth in place. The lady had considerable pride in her appearance, and, of course, wants her new teeth to look natural and nice. He had not yet seen a way to overcome the difficulty. It would not be possible to bring incisors down to the same line with teeth inserted on the prominences mentioned. Should the prominences be trimmed down?

Dr. Chisholm replied, that he would do it unhesitatingly, if the patient would submit. The operation would, of course, be more tedious after the parts had been sometime healed and the gums hardened.

Dr. Boyd had not had charge of the case at the time the teeth were extracted.

Dr. Chisholm further spoke of various points to be taken into consideration; the length of the upper lip; the condition of the gum tissue; the character of the bone, etc. If the bone was thick and sound it would be correspondingly more difficult.

Dr. Boyd said that he had made try-plates with a great variety of teeth, but could not find any cuspids and bicuspids, short enough, or incisors long enough to get them all on line.

Dr. Hall asked when the lower teeth struck? and whether he had tried grinding off the gum from short gum teeth?

Dr. Boyd said the shortest plain teeth he had been able to find were still too long.

Dr. Chisholm said that in such a case he would apply cocaine to the gums and dissect very carefully; then trim away the process, as necessary. From long loss of the anterior teeth, the jaw was doubtless contracted and arched up, while the gums of the cuspids and bicuspids dropped down.

Dr. Walker considered it always desirable to avoid the necessity of wearing a plate. He had regulated a similar case—the patient a young lady of sixteen years of age. The front teeth were very good but irregular and projecting fully one-half inch. The six year molars were very defective, and there was no point of anchorage inside of the mouth. He had hit upon a novel expedient. He got the front teeth in even line and then attached them by ligatures to an inside plate to hold them so. He then applied a hickory brace, or rod to the labial surface of the teeth, letting extend across the face beyond the sides of the head, placing a cushion on the back of the head, he passed an elastic band around the head, attached to the ends of the rod, with constant pressure he drew them back into proper articulation with the lower teeth, sacrificing only the defective first molars.

Dr. Chisholm had had another case of excessive prominence a few months ago. The patient had been blind for a number of years. His health was very poor, from inability

to take active exercise, and consequent lack of digestion. He was also of a consumptive family, very much emaciated and very delicate. He had concluded that if his teeth were extracted and a new set inserted it might benefit his health. After the teeth were extracted, from lack of vitality, there was no absorption. The processes remained very prominent, covered with pale yellowish gums with exudations of pus. He was very anxious to have his plate in. Accordingly, making crucial incisions, the gums were turned back and all the prominences whacked off. He was now doing very well.

Dr. E. S. Chisholm offered the following

RESOLUTION.

WHEREAS, The object for which the issuing of students' permits to practice dentistry in the State of Alabama, by the Board of Dental Examiners, has accomplished the object for which it was intended, and believing that to continue the course is an injustice to the public, the profession and no advantage to the student to whom issued, besides having no legal sanction,

Resolved first, That the sense and advice of this Association is to discontinue the course, after the adjournment of the present meeting, of issuing students revocable permits. This to begin from the present meeting of the Board.

Resolved second, That temporary license shall only be issued to dentists of competence, as prescribed by law, who come from other States, still holding residence in other States or who are now residents of Alabama, or such other persons as apply for a licence on ground of thorough qualification, this Association holding that the requirements to practice under a temporary licence to be equal in every respect to a permanent license.

(Signed) E. S. CHISHOLM.

Adopted.

Dr. Dunlap said that he endorsed the resolutions most heartily.

Dr. Robertson inquired if they did not conflict with the law?

Dr. Dunlap replied that the law said *may* but was not obligatory. It was intended to meet an emergency which no longer existed.

The resolutions were unanimously adopted.

Dr. T.. M. Allen said that last year fruitless efforts had been made to secure certain amendments to the dental law. That the subject ought to be discussed now.

Dr. Dunlap seconded by Dr. A. T. Pierson, moved that the Committee on Legislation be continued, with instructions to use all due diligence to get the bill through.

Dr. Rousseau said that legislators needed information as to the object of the law. Many were under the impression that the law was intended to regulate prices, or to keep out all but a certain clique, and other misapprehensions.

Dr. E. S. Chisholm said that a good many of the dentists needed information as much as the legislators. If the young men, and men in remote localities knew that all the foremost and best men in the profession, men who have given the subject careful and intelligent study, approve such a law, and consider it an essential measure, they will join heartily to secure its passage, when properly informed.

He suggested issuing a plain, concise circular, stating the main points, the reasons and objects, etc., and send it out for study and consideration. In this way the measure would receive intelligent, hearty co-operation instead of ignorant prejudiced opposition.

Dr. G. M. Rousseau suggested that the whole Association consider itself a committee to secure this result..

Dr. T. M. Allen said that too many on a committee would spoil the work from lack of co-operation.

Dr. Rousseau said that at least, all could work at home and influence, instruct and enlighten his neighbors. We

wanted all members of the profession to take an intelligent interest in the matter.

Dr. Dunlap said that high-toned, honorable gentlemen did not like to report delinquents. It was of course their legal duty, but it was none the less repugnant.

Dr. Boyd said that if the signature of every dentist in the State was attached to the petition, legislators would respect numbers, even if they had no intelligent comprehension of the subject.

Dr. Rousseau said that if each man present would write to all the dentists in his county, and get his views, and give the proper explanations they would soon be set right and their misconceptions corrected. That the work of the committee was not a pleasant task. It was asking men to do their duty; to talk to newspaper men; to get the people, the legislators, and the dentists all interested, etc.

The resolution, continuing the committee, was carried.

Committee—G. M. Rousseau, Montgomery; E. Wagner, Montgomery, Geo. Eubank, Birmingham.

Dr. Coyle said he could only give his own individual view, which was based on his experience in Georgia. It was almost an impossibility to harmonize everybody on any one particular view. For many reasons a small committee was better than a large one; three men could be got together for consultation much easier than ten. There were two objects to be secured: to get unanimity of feeling on the part of the profession, and to exert a proper influence with the Legislature. There were always some men who, on principle, would oppose anything and everything, and who were always ready to organize in opposition. Everybody could not be visited. The intelligent men in the profession; those who had given the subject long and careful consideration, were the ones to consult in such matters. There would always be some one who had probably never given the matter any thought, ready to propose an *amendment* to the most carefully considered and cautiously worded section of any law. A few wise men of discrimination would do better

by concentrating their powers, than to have it spread out all over the State, taking every man into their counsels. No definite conclusion could ever be arrived at in that way.

Dr. Dunlap said that it was an important matter to have the argument properly presented before the Legislature. The means employed in some colleges to defeat the intent of Dental laws must be borne in mind.

Dr. Rousseau said that it was very important to have the matter in the proper hands, before the Legislature. Last year it had been brought up when every one was impatient to adjourn; there had been no one to push it, and no one to speak for the measure or to defend it. If they had had one or two men there to speak and work for it, at the proper time, it would have been carried. This must be looked after next time.

Dr. Robertson—the State of Georgia had the double advantage of having a representative in the Legislature who was a dentist and a man of influence.

Dr. Coyle said an important point to be borne in mind was that everything depended upon the action of the judiciary committee. If they reported favorably on a bill it was usually sure to pass. If some one who can show that he is acting by authority goes before the judiciary committee and explains the matter to them, making them understand it clearly, and receiving their recommendation, it will pass —otherwise it will not.

Dr. Dunlap—the present law, as it passed, was worked up by the committee, but not reported back to the Association. When put into the hands of the Legislature it was referred to the judiciary committee, but the chairman of the committee, the Hon. Mr. Brewer, never opened his mouth. We have never known how it got through.

On motion, adjourned to 9 a. m.

FOURTH DAY—First Session.

Friday, April 16.

Called to order at 9 A. M.—the 1st Vice-President, Dr. H. D. Boyd, in the chair.

Opened with prayer by Dr. William H. Morgan.

Roll called by the Secretary. Members present:

J. C. Wilkerson, H. D. Boyd, T. M. Allen, S. Rambo, D. A. Brown, R. B. Chapman, W. W. Evans, J. A. Hall, J. R. McNair, S. W. Tally, A. A. Pearson, W. A. Patrick, T. P. Whitby, G. M. Rousseau, W. D. Dunlap, E. S. Chisholm, R. U. DuBois, George Eubank, A. Jackson, S. G. Robertson, E. Wagner, J. R. Barr.

Minutes of yesterday's sessions read, and, on motion, approved.

The discussion of Incidents of Office Practice was resumed.

Dr. R. B. Chapman, of Troy, narrated a case in which a physician had extracted a lower molar—probably the second, though the first was missing, and the patient said he had never had any other extracted—(he was a boy of 14 years of age.) The second bicuspid had fallen back to where the molar should have stood, and in the vacant space a tumor had grown, which pushed the cheek out half an inch, the protuberance being noticeable at a distance of twelve feet. It was painful on pressure. The jaws had been set and were pried open for the extraction. Had treated with iodine externally, low down on the cheek. The jaws had remained firmly closed for a week after the extraction. The tumor was very hard, and painful under pressure. He asked for opinions and advice.

Dr. Dunlap said he would not like to hazard an opinion, or give any advice, without seeing the patient. Such cases required very careful examination. If there was any sus-

picion of malignancy, he would let it severely alone and turn it over to a physician, letting him take the responsibility. It was eminently proper for the dentist who thoroughly understood such a case to treat it, but without a thorough understanding a fire might be started that could not be controlled.

In answer to questions, Dr. Chapman stated that the tumor was the size of a large buckshot, and fully one-fourth of an inch long. It was situated back of where the second bicuspid should have been, though the latter had fallen back into the place of the molar. The protuberance of the cheek would indicate a much larger tumor.

Dr. George Eubank related a case of Anchylosis. The patient, a boy of nine years of age. Ten months ago he had had an attack of Typhus fever, treated with calomel He was severely salivated; two-thirds of the inferior maxillary was involved with extensive sloughing, and loss of three teeth on one side and four on the other. When first seen by Dr. Eubanks his mouth was tight shut; absolutely immovable, and had been so since the beginning of the trouble. He had, in the meantime, been fed through the opening made by the lost teeth. With a surgeon assisting, he had given ether, and tried to break up the growth, but after two or three efforts had to give it up, though he removed some necrosed bone. Two weeks later he tried prying open, but found it would break the jaw. It was absolutely anchylosed. In case of vomiting or regurgitation of food he considered the boy's life would be endangered from suffocation, as he would not be able to eject it. The jaws had been closed and motionless for several days before it was noticed during the boy's delirium and high fever. The masseter muscles were rigid; could not move the jaw 1-100 of an inch. They had been in this condition for ten months. He had written to Prof. Briggs, of Nashville, in consultation, and would probably send the boy to him for a surgical operation. By constant trying, he had learned to articulate sufficiently to make himself understood.

Dr. T. M. Allen had had a similar case, but due to contraction of the muscles. With the aid of strong springs and wedges he had got the jaws open about one inch. The masseter muscles were enlarged and very hard under pressure. There was no anchylosis.

Dr. Allen also asked some one to name a disease which had puzzled him, though he had treated it successfully. The disease commenced around the first right superior molar; thence it spread to the left inferior third molar; thence it jumped to the right side, and some distance down the throat. It commenced with white spots, which spread over the surface, with an exudation like sweating a white, clear, liquid. It then turned very red; was not sensitive or painful, except in contact with food or liquid. He treated it with chlorate of potash, tannic acid, powdered on to the parts, and Holmes' Sure Cure Mouth Wash, and cured it after six weeks' treatment. There had been no return for five months. She had been to three or four physicians, who had treated as a disease of the throat, and advised an operation, to which the patient would not submit. He had cured it with local treatment alone.

Dr. Walker said that the great benefit derived from associations was found in this interchange of ideas. Nearly every dentist had some original method of treatment, the result of his experiments in emergencies. In this way, we could always learn something new. He had brought with him some casts of peculiar cases in regulating, in which he had been very successful in overcoming deformities. Each one had required special study, and the invention of something specially adapted to that particular case, but which might offer suggestions to others in similar cases.

He first showed the casts of a mouth in which very extensive absorption had taken place, the plates now worn, when properly articulated, measuring two inches from the upper to the lower ridge, or rather the groove located where the ridge should be. The teeth had been extracted in 1865, and a full upper and lower set, on red rubber, in-

serted. The patient's health now began to decline, and continued to do so for three years, though under treatment by the best physicians, who could find no cause for the trouble. The patient lost forty pounds in weight. Finally, noticing certain symptoms and peculiarities in various mouths, under rubber plates, which he now learned to term "rubber disease," he examined this case, and found it in the same condition. The rubber plates were at once replaced with other material. Absorption had even then made considerable headway. The patient has since worn celluloid plates, without any recurrence of the trouble, and has recovered robust health.

Dr. S. G. Robertson inquired the nature of the effects of what Dr. Walker termed rubber disease?

Dr. Walker replied that the effects varied in different constitutions, but the most usual features were great absorption, diseased mucous tissues, general debility, loss of weight, etc.

Dr. Robertson asked what there was in the rubber that could produce such results? He knew there was some vermillion in it, but did not suppose it was enough to do any harm.

Dr. Walker asked Dr. Robertson how much vermillion he was willing to swallow at one dose?

Dr. Robertson said he was not anxious to take any.

Dr. Walker said that small doses, continuously taken, were certainly injurious.

Dr. Robertson thought the mercury and vermillion were so well mixed with the rubber that it could not do any harm.

Dr. Dunlap asked how he would combine mercury and vermillion? What was vermillion, if not mercury?

Dr. Walker described another case, in which the rubber plates worn were vulcanized very hard, almost a mahogany color. An eminent physician and surgeon being in his office at the time of a visit, he asked him to diagnose the case, saying nothing about the rubber plates. The physi-

cian made a careful study of the case, and pronounced it a case of poisoning by nitrate of mercury. The facts were that the patient was an Israelite, who had his family record very exact for over a hundred years, and knew that no mercury had been used by himself or in the family, which was very healthy. His own health had gradually failed; he had been treated by various physicians, visited Hot Springs, gone to Europe; but all without benefit. When the acute trouble in the mouth developed, the physician treated it with nitrate of silver, which only aggraved the trouble. Finally, his case had been pronounced beyond cure, and he had been counselled to put his worldly affairs in order and prepare for the other world. This statement explained the trouble to the satisfaction of Dr. Walker and his friend. Although the patient had never taken any mercury, enough had been absorbed by the time, from the plate, to combine with the nitrate of silver applied and produced the condition of poison by nitrate of mercury diagnosed by the physician.

Dr. George Eubank asked what kind of rubber was used?

Dr. Walker replied, the only kind then made—ordinary red rubber, which was one-third vermillion.

Dr. Eubank thought it only reasonable to conclude that the mercury in a rubber plate worn continuously in the mouth, might prove injurious, when we knew the bad effects of the small quantity of arsenic in wall papers or carpets.

Dr. Pierson inquired in what respect celluloid was better than rubber, as it was also covered with vermillion?

Dr. Walker replied that, according to the circulars sent out by the respective manufacturers, the proportion of vermillion in red rubber was one in three; in celluloid it was one in two hundred.

Dr. T. M. Allen said that he found the necks of the adjacent teeth became very sensitive when partial plates of red rubber were worn; that he had discarded red rubber ten years ago in his own mouth, from the study of Dr. Walker's

articles on the subject. He found black rubber a good substitute.

Dr. Walker showed the casts of a case with a very naturally projecting under-jaw. The canines had erupted outside of the arch, and some one who called himself a dentist, but boasted he had never been outside of his native State, and had never seen another man operate, had extracted three sound teeth to give room for the canines to come into line. The result was the spaces had entirely closed together; the superior maxilary had so contracted, increasing the natural deformity until the upper teeth set entirely inside of the lower ones, the articulation of the molars was destroyed; the outer cusps of the upper teeth meeting the inner cusps of the lower teeth. The young man could neither masticate nor articulate with any comfort.

Dr. Walker, by using modifications of the coffin plate, (several which had been worn in this case being also exhibited) had so expanded the arch as to bring about proper articulation of the molars, make space for the re-insertion of the three exhausted teeth, and brought the upper teeth out over the lower ones. He showed casts of the mouth after the operation.

(Dr. Walker exhibited and explained the models of several other peculiar cases, which would require illustrations to make them intelligible).

Dr. Dunlap expressed his gratification at Dr. Walker's thought in bringing the models and in bringing the cases before the Society. It opened up a most instructive field. If all would preserve casts of peculiar cases that fell under their notice, and make notes of the same, and bring them to the meetings, much practical benefit would be conferred. We could see both the evil and the remedy and learn how it was accomplished. It would be much more profitable than abstract discussions of metaphysical questions.

As to the so-called rubber disease, he had never seen any worse results from rubber plates than he had seen under celluloid or metal. Chemical analysis had proved the

preparation of mercury used inert or comparatively so. There were too few well-authenticated cases to condemn its use. In the case described where the poison was by nitrate of mercury, it was possible that such result might have followed the contact of a rubber plate with a surface covered with nitrate of silver, but not necessarily from mercury in the tissues. More probably the mercury in the plate was set free by that contact. He did not like rubber in all cases, and he did not like celluloid in all cases. If he was convinced that rubber was deleterious he would feel it his duty to his patients to abandon it. But as far as he investigated the matter he thought the deleterious efiects were due to some individual idiosyncracy, and not sufficiently demonstrated to condemn rubber *in toto*. When a sufficient array of facts was brought forward to drive it out of the market, he was willing it should be done. He would not knowingly use anything that was poisonous, but in the present state of the matter he did not consider the discussion of the effects of mercury in the system profitable to the profession.

Dr. Walker said that Dr. Dunlap's *theory* of the nitrate of mercury case was very ingenous, but the *fact* was that the mouth had become so very sore, before the nitrate of silver was applied, that the plate had been discarded some time previously. The physician who had at his request diagnosed the case was also an extremely cautious man, and had made very careful examination of the case before pronouncing an opinion.

Dr. Boyd said that he had seen as much trouble under a gold plate as under any other. He would not be afraid to take a teaspoonful of sulphuret of mercury at once himself; that it was so combined in a hard rubber plate that it was not possible for free mercury to be given off. With the temperature of the mouth at 9 ,° the plate would be the same. If the plate was perfectly adapted, and worn night and day, the mouth would never get cool, and the constant pressure of a tight-fitting plate would cause inflammation. Re-pol-

ishing the plate, and the use of a good mouth wash would soon restore the natural condition.

Dr. Walker said he too had seen sore mouths under all kinds of plates that were not kept clean, but the disease found under rubber plates was very distinct from that caused by filth, and readily distinguished. A dirty plate did not, as a rule, produce any constitutional disturbance, as the rubber disease did. He had not anticipated or desired a discussion of the rubber question. He hoped to have the subject of *regulating* discussed, and hoped to receive as well as offer some suggestions.

Dr. R. B. Chapman said he had a case in hand where the right, superior canine had fallen in, striking inside the lower teeth. The patient was very anxious to have it brought back into line, but would not wear a plate that made her teeth sore. To make a more rapid operation he had extracted the second bicuspid, in order to draw back the first and make room for the canine, but the patient would not wear anything that hurt. Would wear it awhile if she did not have company, but was afraid to keep it in at night, and when asleep kept her teeth tightly closed. The tooth was a little shorter than the others; the patient a lady of twenty-five years of age.

Dr. Eubank said that if he could not secure the co-öperation of the patient, of course he could not accomplish anything.

Dr. Walker said he had a very troublesome case in hand; a young lady who was impatient and uncontrollable. If the plate annoyed her she would put it in her pocket. Of course the teeth would fall back and all that had been accomplished lost. He had finally made a plate, through which he had passed sixteen ligatures, and so tied the plate to the teeth so that she could not get if off. With this he had accomplished more in a few days than he had been able to do in weeks before.

Dr. Eubanks inquired if Dr. Walker would undertake regulating after thirty years of age.

Dr. Walker replied that he would prefer to have it done earlier, but he had successfully regulated teeth for patients beyond that age. The character of the case, and the temperament of the patient had to be taken into consideration.

Dr. Eubanks asked if he would attempt to bring into place a devitalized tooth? The patient was twenty years old, and had all the teeth in the arch except a devitalized superior lateral incisor, which lifted the lip.

Dr. Walker said that he could not say without further knowledge of all conditions.

Dr. Eubanks said that he had thought of putting on a new crown, and doubted if he would succeed, on a devitalized root.

Dr. Walker said that it was not advisable as a rule, as it might cause an abscess; but if all the circumstances were very favorable, he might perhaps move it.

Dr. Boyd offered Dr. Chapman a suggestion in the shape of a small appliance of zinc, acting as an inclined plane, to be placed over the inferior tooth to lift the upper canine out, that had fallen in and struck inside of the lower tooth. It should be ligatured to the lower teeth, *straddling* them, so that biting upon it would gently lift the tooth forward. He had succeeded in lifting out incisors in that way. Even if it did throw back the inferior teeth it was a small matter which would soon correct itself in holding the superior tooth out. To adjust it, he would put the ligature through, leaving a loop, which would be drawn up after the appliance was in position, and tied securely.

Dr. E. Wagner had accomplished the same result by taking an impression of the parts in base-plate gutta percha. Imbedding it, he trimmed it to an inclined plane, making a silver plate, which brought the tooth out in a few days.

Dr. Dunlap thanked Dr. Boyd for his suggestion. It was a very simple appliance and very easily applied. So simple that it looked as if everybody ought to have known it all the time.

Dr. Walker said that that one little thing paid him for his

trip. It was so much better than plate capping the teeth. He thought that the more attention was given to regulating the more highly its importance would be appreciated. That filling teeth and making plates was only patchwork compared with this. The time would come, he believed, when neither would be considered the legitimate work of the dentist. By proper instructions to patients we could change the character of tooth substance and prevent decay, while, if we did our duty in regulating teeth, by persistently correcting deformities, we would prevent the tendency to future deformities and thus overcome bad heredity in both directions.

One gentleman had said he had tried to hurry up a case by extracting a tooth. As a rule there had been too much of that The final result was of much more importance than a little time gained now. A bad hereditary tendency towards contraction was created by extracting teeth.

Dr. Boyd spoke of the appliance he had exhibited as exemplifying a principle. The material used was not essential. He used zinc because it had sufficient strength, with easy working qualities, and was not harsh to the teeth.

Dr. T. M. Allen said that Dr. DuBois had mentioned cocaine in his paper. His own experience with cocaine had not been satisfactory.

Dr. DuBois said that when cocaine was first introduced he had procured 2½ grains, which he had put into three drachms of distilled water. He got it because he had a patient who had heard of cocaine and insisted on having it. Was nervous and excitable and badly frightened. He knew that sometimes even water would answer a good purpose. He saturated tissue paper with the solution and applied it around the teeth for three or four minutes, and then extracted the tooth. The patient could not believe the tooth was out, or that it was broken off. He had been very successful with it in extracting roots, even when they were imbedded one-quarter inch under the gums. Applying it on tissue paper seemed to freeze or numb the gums, so that he

had taken out four in succession without complaint. The only complaint was that the gums felt *curious* for some time afterwards—there was no soreness afterwards. The patient was so well pleased that she sent many others and fairly preached cocaine. He had been quite successful with negroes by applying alcohol and extracting quickly during evaporation.

Dr. Eubank said he had sometimes extracted with pure water and they said it did not hurt at all.

Dr. Dunlap said he always extracted with forceps.

Dr. DuBois said he had also used the oleate of cocaine with success—perhaps it was only imagination, but he believed the crystals did have a good effect.

Dr. Allen inquired if he had tried it for sensitive dentine. He did not think it did any good. It numbed the tongue, but he did not think it had any effect on tooth-tissue.

Dr. Eubank said he had tested it thoroughly on dentine. He had applied it for eight minutes on a very sensitive lower molar, the nerves not exposed, but it had not made a particle of difference. He had then tried the olate for five minutes, but there was just as much pain.

Dr. Wagner said he had applied it for 20 or 25 minutes for extracting the roots of an upper molar. The crown was all gone, and the three roots separated. It had produced a numbness of the entire face. He lanced freely, with very little pain, but the extraction hurts as badly as though there had not been any application. He had tried it on his own wife; was satisfied she would give him the benefit of her experience, but it had done her no good.

Dr. J. H. Coyle said that McKesson and Robbins had sent a man to Baltimore, winter before last, to give the college ample opportunity to test its efficacy in their clinics, and report the results. He had not been able to give the report they desired in reporting the results obtained. He used it by hypodermic injections of the one-fourth per cent. solution. In one case he succeeded in obtruding the gum for the removal of a dead tooth. With sensitive dentine he

obtained partial results only. He had had varying results since, but was satisfied it had been largely overrated. He had tried it on exposed pulps without benefit. He had not found anything to equal ether spray. With ———'s spray apparatus, an assistant throwing a few jets at a time, the most sensitive cavities of a child twelve years old could be excavated without pain.

Dr. DuBois said that at one time the whole country round got excited over Buck's remedy; nothing could be done without Buck's remedy. It was necessary to have that *or something else*, and he believed water was just as good as anything else, so that it won the patient's confidence and made them willing to submit.

Dr. Coyle said that for a local anesthetic, equal parts of aconite root and chloroform gave very fine results, and was far superior to cocaine.

Dr. Walker found that cocaine could not be depended upon. In some cases it gave very satisfactory results, and again it would seem to be absolutely inert, though used from the same bottle.

Dr. DuBois said that he had given up the hypodermic injections as physicians had pronounced it dangerous.

Dr. Coyle said there was no risk incurred beyond that of inflammation or perhaps an abscess. There was nothing gained in simply reaching the root of the tooth. It must reach the neighborhood of the nerve supplying that part. With sufficient knowledge of anatomy to reach the dental nerve, insensibility of all the teeth supplied by that branch could be secured. There was no particular danger incurred, and the anesthetic effect was sufficient for the extraction of several teeth. It would last perhaps twenty minutes, which was more than sufficient for extraction.

Dr. Chapman said that he could cut around the tooth with much less pain than he could make a hypodermic injection.

Dr. Walker said that he found cannabis indica was generally successful where cocaine failed. The samples furnished by Parks, Davis & Company to the Medical Associa-

tion when it met in New Orleans, had proved very efficacious.

Dr. J. A. Hall, of Collinsville, had found cannabis indica very good—it was his main reliance, both the tincture and the fluid extract.

Dr. Dunlap deprecated the prominence given to quack remedies, such as the Buck's remedy mentioned. A mountebank, who did not ever pretend to be a detnist would advertise some nostrum as infallible, set up a stand on the streets and extract hundreds of teeth without pain, and people wondered why dentists could not do as much. We lacked one element of success—cheek and impudence, a big voice and a brass band.

Dr. T. M. Allen said that teeth that were extracted before an audience never hurt. There was great excitement and a big stir, and outsiders had no opportunity to investigate. It was the duty of the profession to inform the people of the fallacy of these things.

Dr. Walker was sorry to hear the work of such mountebanks called *a success.* They caused the destruction of hundreds of teeth that it was our duty to save. It was anything but *a success* to make people believe that it was a good thing to have teeth extracted without pain. There were men who called themselves dentists and boasted at night how many teeth they had taken out that day, and "got the money in their pocket." A tooth that could possibly be saved, should never be extracted.

Dr. Rambo said that, as a rule, the men who extracted teeth without pain, had a band of music making a big noise to hide the groans, and sent them out the back way. There was such a rush and excitement that the patient perhaps did not realize that he was hurt, but it hurt all the same. They were shoved out of the way so rapidly that they had no time to say whether they were hurt or not. The class of people who had teeth extracted under such circumstances were not the people who would ever have their teeth saved. It is not our patients who go there.

Dr. Chisholm said he had been on the *qui vive* for obtundents, but had never found anything satisfactory short of total anesthesia. There was, however, a great deal in knowing how to influence patients and control the mind. He never wants a mother to come with her child. Her natural sympathy for the child tempts her to deceive it with false promises—"it will not hurt," etc. He would never deceive a child in any manner. The ambition of a child could be stimulated to show its courage and bravery, and it would stand a great deal of suffering without flinching. By talking cheerfully to a child, and letting it cry a little, if necessary, much could be accomplished. If a patient got nervous and felt like fainting, a little whisky would often act as a stimulus, and have a better effect than other more vaunted obtundents.

Dr. Dunlap said that children should never be allowed to witness the suffering of others, or be told about it. He had great success in extracting teeth for little children, by keeping them out of the chair, letting them stand beside you and open the mouth; then, with the forceps in one hand, *pinch the nose* with the other, and they would not know what hurt them.

Dr. Walker said he had had a peculiar experience with a fainting patient. She would faint dead away before she got her mouth open, and so put an end to the operation every time. It was necessary to extract a large number of roots. Her physician having an office on the same floor, he was called in, on one occasion, and finding her in a very dead faint, said: "You could not have a better anesthetic. Just go ahead and take out all you can before she comes too." This was accordingly done, and the teeth successfully extracted, without arousing her from her fainting condition.

On motion, the subject was passed.

On motion of Dr. Dunlap, the following amendment to the By-Laws was put before the Society, receiving a unanimous rising vote in the affirmative:

Resolved, 1. That article 9 of the By-Laws be amended so as to read: "Unless some other *time and place* is selected by the Association."

Resolved, 2. That the Executive Committee be instructed to correspond with all the members of the Association, and ascertain the time that would best suit them for the annual meetings, and select the second Tuesday of the month that is the most desirable, as expressed by the majority of the members, and notify the Secretary of the time selected, at the earliest moment; and further, in case of an epidemic or other calamity, the Executive Committee be authorized to change the date or place of meeting, for the time being, to the best interest of the Association.

Dr. E. S. Chisholm moved the appointment of two delegates to the Southern Dental Association.

Dr. Dunlap stated that the Southern Association was not a body of delegates.

The motion of Dr. Chisholm was withdrawn.

Dr. Dunlap stated that there was in the hands of the Secretary an application for appointment to the vacant scholarship in the Dental Department of the University of Maryland.

The question arose, should it be referred to the present Executive Committee, and be acted upon at once, or referred to the new Executive Committee about to be elected, and laid over, giving a chance for other applicants to compete for the scholarship?

Dr. S. G. Robertson thought there should be a competitive examination of all applicants, giving it to the one who passed the best examination. He would then be recommended by the Executive Committee to the President of the State Society, who would give him the necessary certificate.

Dr. T. M. Allen said that the documents would then have to go to the Secretary to receive the seal of the Association.

Dr. E. S. Chisholm said that the applicant in question was a nephew of his who was already at the University, under expense, having recently married; that as the scholarship was and always had been vacant, no application ever having been made for it before, he thought as he was the only applicant, there could be no impropriety and no injustice in taking immediate action upon the application. It was important to him to receive it as soon as possible, and that no one would be benefitted by deferring action a year, as there were no other applicants to compete for it.

Dr. Allen stated that the mere possession of the certificate from his State Society would not admit the candidate to the University unless he was found competent according to the standard of the University, but if successful, he held the scholarship until he graduated, even if it took five years.

Dr. Dunlap explained that the applicant was already at the University, had passed the examination and been admitted, and had paid his $50.00 fee. The object of the scholarship was to lessen his future expenses. He, however, was opposed to immediate action. He thought due notice should be given, that other young men might have an opportunity to send in application.

Prof. Coyle said it would be perfectly correct for the present Executive Committee to act upon all present applicants, giving due notice, and referring future applicants to the new Executive Committee.

Dr. Chisholm said there were several scholarships available, if other applicants came forward and were found competent.

On motion of Dr. Rousseau, the matter was left with the Executive Committee, with power to act.

Dr. E. S. Chisholm made a report on behalf of the Board of Dental Examiners, which was accepted.

ROOMS BOARD OF DENTAL EXAMINERS, STATE OF ALABAMA,
Montgomery, Alabama, April 16, 1885.

To the Dental Association :

In accordance with required usages of the Board heretofore, we have the honor to submit the following report, which is probably incomplete as to the work during the past year, as both the Chairman and Secretary of the Board are not in attendance at this meeting. The Secretary, we learn, has been out of the State for some months, and, on his leaving, turned over the books and papers to a member of the Alabama Dental Association, and not a member of the Board. Consequently, the papers came into our possession incomplete.

License has been issued to the following gentlemen, on grounds of full compliance with the law:

W. F. Slaughter, LaFayette, Chambers county, diploma.

Wiley A. Patrick, Evergreen, Conecuh county, diploma.

Albert A. Pearson, Autaugaville, Autauga county, diploma.

J. M. Clyde, Birmingham, Jefferson county, diploma.

J. W. Shoemaker, Pratt Mines, Jefferson county, diploma.

J. A. Ellard, Wood Lawn, Jefferson county, diploma.

Temporary license may be granted to only one applicant. Cary L. Boyd, of Troy, Pike county, who is a one-course student, applied for an examination, looking to the securance of a permanent license; but, on account of want of time, and without prepared written questions necessary to give the Board full assurance of his competence to a permanent license, the Board recommended him to the members of his district to issue a temporary license.

The Board of Dental Examiners would recommend to this Association that in future it will avoid the electing of any one member to office, both in the Association and on the Board of Dental Examiners, for the same time, as it is

wholly impracticable for such to serve efficiently in this dual capacity.

Respectfully submitted.

E. S. CHISHOLM, Ch'mn *pro tem.*,
SAMUEL RAMBO,
J. C. WILKERSON,
Of Board of Dental Examiners.

On motion, adjourned to 3 P. M.

FOURTH DAY.—SECOND SESSION.

FRIDAY, April 16th.

Called to order at 3 P. M. The President in the chair.

There being no further scientific business before the Association, miscellaneous business was taken up.

Dr. E. S. Chisholm introduced resolutions tendering the thanks of the Alabama State Dental Association to the railroads for courtesies extended in reduced rates; to Mr. D. P. West, proprietor of the Exchange Hotel, for use of reading room, parlor, and other courtesies; to the Medical and Surgical Society for use of hall; to the city press for daily reports of proceedings; to visiting dentists from other States for generously contributing to the interest of the occasion; and to Mrs. J. M. Walker ("Mrs. M. W. J.") for official report of all proceedings.

The resignation of Dr. S. Rambo from the Board of Dental Examiners was accepted, with regrets.

Dr. Chisholm said that he had worked with Dr. Rambo for years. That the Board of Examiners was the door to the profession. It stood behind even the colleges, and guarded the threshold well. It needed good men; men of discretion and sound judgment. He regretted deeply that

Dr. Rambo should feel it his duty to resign, but, if such was his decision, it must necessarily be accepted.

Dr. DuBois hoped that Dr. Rambo would be induced to withdraw his resignation.

Dr. Rambo said that he should not have tendered his resignation if he had designed to withdraw it, but that it would no longer be possible for him to fulfill the duties of the position.

Dr. Robertson moved that the resignation be accepted. He felt that it was not tendered merely to test the sense of the body; that Dr. Rambo was not a man to act except from judgment and conviction. Though he deprecated the necessity it appeared to be inevitable.

Dr. G. M. Rousseau was appointed to fill the vacancy.

The Committee of Arrangements reported the following:

To hire of chairs	$2 00
Janitor	2 00
Sundries	45
Gold for clinics	2 00
Total	$6 45

Referred to the Auditing Committee.

Dr. S. G. Robertson said he wished to move the appointment of a committee to investigate the question of the injurious effects of red rubber. That he had not investigated the matter himself. If it was true that it produced injurious results he did not wish to use it. He would not willingly or knowingly injure his patients. That exactly opposite views had been expressed in the discussion. One man, eminent in the profession, who had apparently been investigating the matter for a number of years, declared his undoubted conviction that it was poisonous. Another, of equal celebrity, said it was not. That the question ought to be settled. He, therefore, moved that a committee be appointed to investigate the matter; to gather evidence from all sources and quarters and furnish a full report. A decision reached in this way by a progressive body like the

Alabama State Dental Association, would have weight with the profession.

Dr. S. Rambo seconded the motion. He believed it injurious, but was not chemist enough to say whether it was the mercury in the compound or its want of conducting power. He would like to have the question thoroughly investigated.

The motion was lost.

Dr. Rambo asked if they were afraid to investigate the matter.

Dr. E. S. Chisholm said he had constituted himself an "investigating committee of one" eighteen years ago, and was not yet ready to report.

Dr. Dunlap moved to have all changes or amendments to the constitution and by-laws incorporated with the transactions.

Seconded and carried.

Dr. Dunlap moved that the new volume of transactions include the record of all unpublished sessions, bringing the transactions up to date.

Seconded and carried.

On motion of Dr. H. D. Boyd, of Troy, a committee, consisting of Drs. Geo. Eubank of Birmingham, J. R. Barr of Eufaula, S. G. Robertson of Eufaula, with Dr. H. D. Boyd as chairman, was appointed to prepare a circular for publication in all the newspapers in the State, instructing the people in the care of teeth, and warning them against indiscriminate extraction by travelling mountebanks.

The election of officers was the next business on hand.

Dr. Dunlap moved that nominations by ballot be dispensed with, as after the first ballot it was possible that every man might be found to be a nominee. He wished to make a *viva voce* nomination of a member who had been tried and found to be always faithful and true. He would nominate Dr. R. U. DuBois, of Greensboro, for President. [Applause].

The Chair—Are there any other nominations?

Dr. S. G. Robertson—I hope no other nominations will be made. I move that the rules be suspended and that Dr. DuBois be nominated by acclamation.

Dr. DuBois moved that Dr. Dunlap withdraw his nomination, and the election be proceeded with in the usual way —by ballot.

Dr. E. S. Chisholm seconded the motion, which was carried and ballots distributed.

Dr. DuBois received all of the ballots but one—presumably his own.

The election of Dr. DuBois was declared unanimous.

Dr. DuBois, in a few well chosen words, said, in substance, that words were inadequate to express his sense of the honor thus conferred. That he realized that he was not able to do justice to the Association, but he would do all that lay in his power.

For 1st Vice-President, Dr. E. S. Chisholm nominated Dr. T. P. Whitby, of Wetumpka.

Dr. S. Rambo nominated Dr. S. G. Robertson, of Eufaula.

Dr. George Eubanks nominated Dr. E. S. Chisholm.

Dr. Chisholm declined to accept the nomination, being on the Board of Examiners.

Dr. Robertson requested Dr. S. Rambo to withdraw his nomination, that there might be but one candidate.

This was done, and Dr. Robertson instructed to cast the ballot for Dr. T. P. Whitby for 1st Vice-President.

The remaining officers were then all elected unanimously, as follows:

President—R. U. DuBois, of Greensboro.

First Vice President—T. P. Whitby, of Wetumpka.

Second Vice President—W. W. Evans, of Union Springs.

Secretary—T. M. Allen (re-elected), of Eufaula.

Treasurer—G. M. Rousseau (re-elected), of Montgomery.

Executive Committee—E. S. Chisholm, of Tuscaloosa; G. M. Rousseau, of Montgomery; George Eubank, of Birmingham.

Tuscaloosa and Selma were nominated for place of next meeting.

Tuscaloosa was chosen.

Dr. E. S. Chisholm said he and his fellow townsmen would be proud and happy to have the Association meet in Tuscaloosa. It was a pretty, quiet town, where they would be able to do good work.

Dr. Wilkerson, the retiring President, conducted the President elect, Dr. DuBois to the chair. He was duly installed.

Dr. Dunlap said that the first duty of the new President would be to appoiut a Publication Committee.

The committe was appointed, as follows:

Dr. G. M. Rousseau,
Dr. T. M. Allen,
Dr. W. D. Dunlap.

On motion of Dr. Dunlap, the President was authorized to fill any vacancies that might occur on the Executive or other committees, before the next Annual meeting.

On motion, adjourned.

As per resolution, the time of the next meeting is to be announced by the chairman of the Executive Committee, after due correspoudence with all members; the month selected to be that chosen by the majority.

Respectfully submitted,

LOUIS M. WALKER,
Reporter.

The Association will meet in Tuscaloosa, on the 2d Tuesday in April, 1887.

E. S. CHISHOLM,
G. M. ROUSSEAU,
GEO. EUBANK,
Ex. Committee.

AMENDMENT AND RESOLUTIONS.

MONTGOMERY, ALA., April 16th, 1886.

Resolved, That all amendments to By-Laws and Resolutions, &c., pertainiug to the advancement of this Association, be grouped together and published in the Transactions.

Adopted and so ordered.

MONTGOMERY, ALA,, April 11th, 1883.

REPORT OF COMMITTEE ON CLINICS.

The Committee on Clinics beg leave to report that there should be a radical change made in the Clinical work of the Association. The present plan affords very unsatisfactory results. Members anxious to have their teeth operated on, secure an operator and take the chair at the proper time; but the hour soon passes away, yet the work goes on; a group, large or small, looks on; the regular work of the Association is forgotten. Several of such groups are similarly engaged, and but few are found in attendance upon their duties in the Hall. While this goes on, there may be but few cases that present any marked peculiarity taken in hand. To obviate the evils growing out of the present system, we offer the following resolutions:

Resolved, That the Committee on Clinics be placed in charge of this division; that it shall be their duty to provide a suitable place or places, select or approve cases and operators, and have the operations as varied as possible; and each member is invited to aid the committee, by submitting peculiar cases to their inspections; and operators having any new plan or device, desiring to demonstrate their usefulness, shall first submit them for the committee's approval. Also that the committee be empowered, under proper instructions, to secure the services of one or more clinical Instructors, for which a suitable fund shall be pro-

vided; that parties desiring to operate should bring their own instruments; that the provisions of this resolution shall be put into operation at the close of this session.

Resolved further, That the *third day* of the session be set apart for clinical work. This rule to take effect at once.

We would call your attention to the necessity of remaining in session at least four days, if we do our work thoroughly; and as we have usually adjourned on the third day, if the above resolution should be adopted our time must be extended.

W. D. DUNLAP,
Chairman Clinic Com.

The report and resolutions were adopted and spread upon the Minutes.

April 12th, 1883.

PREAMBLE.

To increase the efficiency, and advance the interest of the Association; to more fully enlist the hearty co-operation of the profession, and the sympathies of the public, I make the following suggestions, and embody them in the following resolutions:

Resolved first, That the President be authorized to select and appoint a member to deliver an opening address, to be delivered on the evening of the first day of our session, at eight o'clock; that two other persons be selected (members or otherwise), to deliver popular lectures on Dentistry, one on the second night and the other on the third night; that the public be courteously invited to attend.

Resolved second, That the Association be authorized to have our Transactions published substantially in pamphlet form annually; each Dentist in the State, and each Dental Association to be entitled to at least one copy.

Resolved third, That the Dues be increased from the present rate to Two Dollars; the increase, one dollar, to be set apart as a Prize and Publishing Fund.

Resolved fourth, That the Committee on Publication be authorized to draw on the general fund, (should the special fund be insufficient), through the proper channel.

Adopted April 13th, 1883.

RESOLUTION.

Resolved, That this Association express its opinion that the State law authorizes the State Board of Medical Examiners, to investigate Diplomas, and if tainted with irregularities of a serious nature, to reject such Diplomas, and the Association will aid the Board in carrying out this construction of the law.

Adopted at Birmingham, Ala., April 10th, 1884.

Extract from Minutes of Association Meeting of 1883: "That the dues be increased from $1.00 to $2.00 per annum, and that the increase be set aside as a publication fund, to publish transactions of Association," etc.

At meeting of 1885: "Resolved That the Secretary be instructed to notify all absentees of their indebedness to the Alabama Dental Association for annual dues to date, and request them to remit amount of their indebtedness to the Secretary as soon as possible."

AMENDMENT TO BY-LAWS.

Resolved, That Article 9 of By-Laws be so amended as to read—

ARTICLE IX.

MEETINGS.

The regular meetings of this Association shall be held annually, on the (2nd) second Tuesday in April, at Montgomery, Alabama, unless some other time and place is selected by the Association.

Resolved further, That the Executive Committee be instructed to correspond with all the members of this Association and ascertain the time that would best suit them for the annual meeting, and select the second (2nd) Tuesday of the month that is the most desirable as expressed hy the majority of the members, and notifying the Secretary of the time selected, at the earliest moment; and further, in case of an epidemic or other calamity, the Executive Committee be authorized to change the date, or place of meeting for the time being, to the best interest of the Association.

Adopted at Montgomery, Ala., April 16th, 1886.

AN ACT

TO REGULATE THE PRACTICE OF DENTISTRY IN THE STATE OF ALABAMA.

SECTION 1. *Be it enacted by the General Assembly of Alabama*, That from and after the passage of this act it shall be unlawful for any person to engage in the practice of dentistry in the State of Alabama, unless said person has obtained license from a board of dental examiners duly authorized and appointed by this act to issue such lscense. Provided, that dentists who have been in the regular practice of dentistry for five years next preceding the passage of this act, shall not be required to submit to an examination, and shall be entitled to licence without fee, which shall be transmitted to him by mail or otherwise upon his application, accompanied by an affidavit to the fact of his having been in the regular practice for the required time.

SEC. 2. *Be it further enacted*, That the board of dental examiners shall consist of five (5) dental graduates, or practitioners of dentistry, who have obtained a license to practice dentistry from a medical board in this State, or from a

dental board organized under this act, and who are members in good standing of the Alabama Dental Association; provided, that said graduates or practitioners have been practicing dentistry in the State of Alabama for a period not less than three (3) years; and provided further, that the first board of examiners under this act shall consist of the present executive committee of the Alabama Dental Association, who shall hold office until the next annual meeting of the said association, and until their successors are elected and qualified as hereinafter provided.

SEC. 3. *Be it further enacted,* That it shall be the duty of the said Alabama Dental Association, at its annual meeting next after the passage of this act, and every two years thereafter, to elect said board of examiners, who shall hold office for the term of two (2) years and until their successors are elected and qualified. The President of said Association shall have power to fill all vacancies in said board for unexpired terms.

SEC. 4. *Be it further enacted,* That it shall be the duty of said board of examiners:

1st. To meet annually at the time and place of meeting of the Alabama Dental Association, or oftener, at the call of any three of the members of said board. Thirty days' notice must be given of the time and place of meeting of said board, said notice to be mailed to all practicing dentists in the State.

2d. To prescribe a course of reading for those who study dentistry under private instruction.

3d. To grant a license to any applicant who shall furnish satisfactory evidence of having graduated and received a diploma from any incorporated Dental College, or who has heretofore received a license from a medical board in this State, without examination or fee.

4th. To grant license to all other applicants who undergo a satisfactory examination, who shall pay to the said board a fee of five dollars for said license.

5th. To keep a book in which shall be registered the

names of all persons licensed to practice dentistry in this State.

SEC. 5. *Be it further enacted,* That the book so kept shall be a book of record, and a transcript from it certified to by the officer who has it in keeping with the common seal of said board, shall be evidence in any court of this State.

SEC. 6. *Be it further enacted,* That three members of said board shall constitute a quorum for the transaction of business, and should a quorum not be present on the day appointed for its meeting, those present may adjourn from day to day, until a quorum is present.

SEC 7. *Be it further enacted,* That one member of said board may grant a license for an applicant to practice until the next regular meeting of the board, when he shall report the fact, at which time the temporary license shall expire, but such temporary license shall not be granted by a member of the board after the board has rejected the applicant.

SEC. 8. *Be further enacted,* That any person who shall, in violation of this act, practice dentistry in this State for a fee or reward, shall be liable to indictment, and on conviction shall be fined not less than fifty or more than three hundred dollars, provided, that nothing in this act shall be construed to prevent persons from extracting teeth.

SEC. 9. *Be it further enacted,* That on the trial of such indictment, it shall be incumbent upon the defendant to exempt him from the penalties of this act, to show that he has authority under the law to practice dentistry in this State.

SEC. 10. *Be it further enacted,* That every person to whom license is issued by said board of examiners shall, within thirty days from the date thereof, present the same to the Judge of the Probate Court of the county in which he resides, who shall officially endorse said license and seal it with the seal of the court, and who shall record said license in a proper book in his office, and who shall be entitled to receive a fee of one (1) dollar for his services, but a temporary license issued under section 7 of this act need not be sealed or recorded.

SEC. 11. *Be it further enacted*, That it shall be the duty of the Solicitor of this State, to prosecute all persons violating all or any portion of this act.

SEC. 12. *Be it further enacted*, That all laws or parts of laws in conflict with this act be and the same are hereby repealed.

Approved February 11th, 1881.

REPORT OF COMMITTEE ON DENTAL LAWS.

The Committee on Dental Laws propose to ask the Legislature, at its next regular biennial session, to amend our existing law by amending sections 1, 2, 3, article 1, and 3 of section 4, sections 8 and 10, striking out article 4 of section 4, to read as follows:

AN ACT

TO REGULATE THE PRACTICE OF DENTISTRY IN THE STATE OF ALABAMA.

SECTION 1. *Be it enacted by the General Assembly of Alabama,* That from and after the passage of this act, it shall be unlawful for any person to engage in the practice of dentistry in the State of Alabama, unless said person has obtained license from a board of dental examiners, duly authorized and appointed under the act of the General Assembly, approved February 11th, 1881, entitled "An act to regulate the practice of dentistry in the State of Alabama," or under the provisions of this act.

SEC. 2. *Be it further enacted,* That the board of dental examiners shall consist of five (5) dental graduates, or practitioners of dentistry, who have obtained a license to practice dentistry from a dental board organized under this act, and who are members in good standing of the Alabama Dental Association; *Provided,* That said graduates or practitioners have been practicing dentistry in the State of Alabama for a period not less than three (3) years.

SEC. 3. *Be it further enacted,* That it shall be the duty of the said Alabama Dental Association, at its annual meeting in April, 1887, to elect said board of examiners, whose terms of office shall be respectively five, four, three two and one

years, in the order in which they are elected; and at each annual meeting of said Association thereafter, one member shall be elected to fill such vacancy, who shall serve for the period of five years. The President shall have power to fill all vacancies in said board for unexpired terms.

SEC. 4. *Be it further enacted,* That it shall be the duty of said board of examiners:

1st. To meet annually at the time and place of meeting of the Alabama Dental Association, or oftener, at the call of any three of the members of said board. Thirty days' notice must be given of the time and place of meeting of said board, said notice to be mailed to all practicing dentists in the State.

3d. To grant license to all applicants who undergo a satisfactory examination, who shall pay to the said board a fee of five dollars for said license.

SEC. 8. *Be further enacted,* That any person who shall, in violation of this act, practice dentistry in this State shall be liable to indictment, and on conviction shall be fined not less than fifty or more than three hundred dollars; *Provided,* That nothing in this act shall be construed to prevent persons from extracting teeth.

SEC. 10. *Be it further enacted,* That every person to whom license is issued by said board of examiners shall, within thirty days from the date thereof, present the same to the Judge of the Probate Court of the county in which he resides, who shall officially endorse said license and seal it with the seal of the court, and who shall record said license in a proper book in his office, and who shall be entitled to receive a fee of one (1) dollar for his services, but a temporary license issued under section 7 of this act need not be sealed or recorded.

SEC. 12. *Be it further enacted,* That indictments under the provisions of this act shall be in form substantially as follows, to-wit:

THE STATE OF ALABAMA,	.....Court
	of ....County.
COUNTY OF.....	.....Term, 18....

The grand jury of said county charge that before the finding of this indictment, A. B., not having procured a license as a dentist from a proper board of dental examiners duly authorized and appointed by law, did engage in the practice of dentistry contrary to law, and against the peace and dignity of the State of Alabama.

.... , Solicitor.

The committee ask that each dentist see his respective representative or representatives and urge upon them the above amendments, as it is very necessary for the future welfare of our profession in this State.

The proposed amendments, as you will see, do not interfere with any one who has been licensed, or who has complied with the existing law, but only with those coming into practice afterwards.

G. M. ROUSSEAU,
E. WAGNER,
GEORGE EUBANK,
Committee.

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It is the result of a long series of experiments, and has been in constant use for several years. By our new method of manufacture there is no GUESS WORK, the molecular change is controlled, making each and every ingot always and absolutely alike in its properties.

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For nearly 10 Years we have made a specialty of manufacturing these materials for Filling Teeth.

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THE EXTRA TOUGH RUBBER is offered to the profession with the assurance that its good qualities place it ahead of all other rubber cases. It is made of the best Para Gum, which is carefully purified. Owing to the great preponderance of gum in its composition, it is very light in proportion to bulk. Its marked characteristics are Strength and Elasticity, and even at the additional cost it is cheaper than the red rubbers, as a much thinner plate is required.

The Extra Tough Rubber is susceptible of a very high polish. A sample will be sent free on application, as it is our desire to give ocular proof of its qualities. It vulcanizes in 55 minutes, at 320 degrees Fahrenheit.

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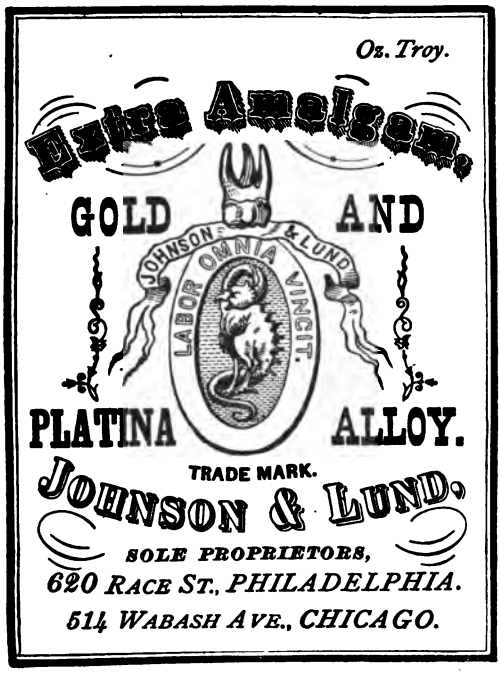

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Three " " " " "		7 65
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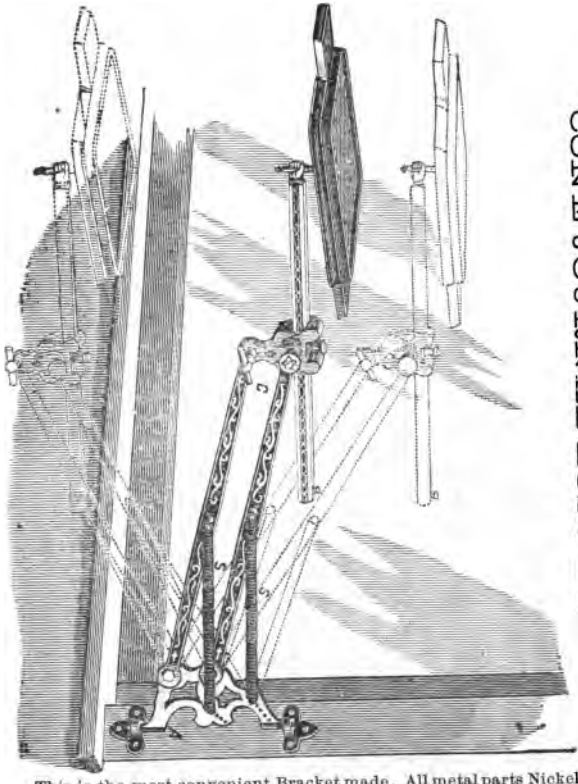

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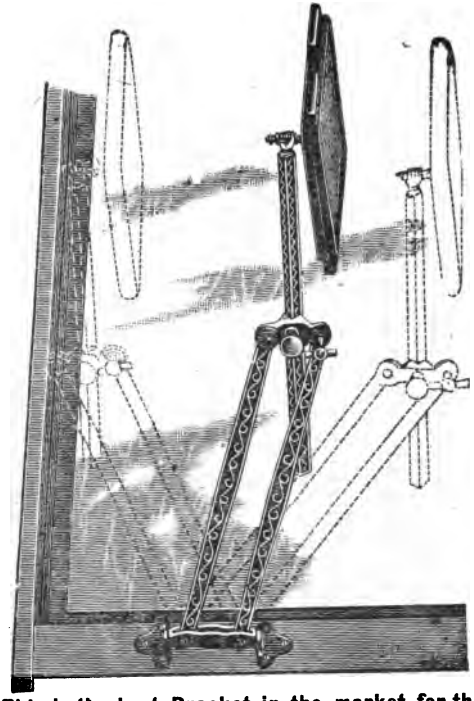

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